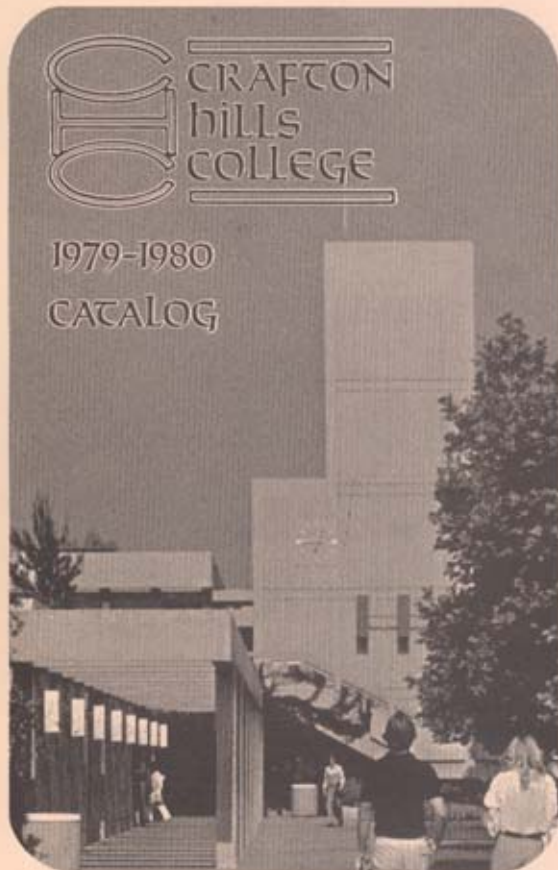




Crafton Hills College

1979-1980 Catalog

CollegeSource

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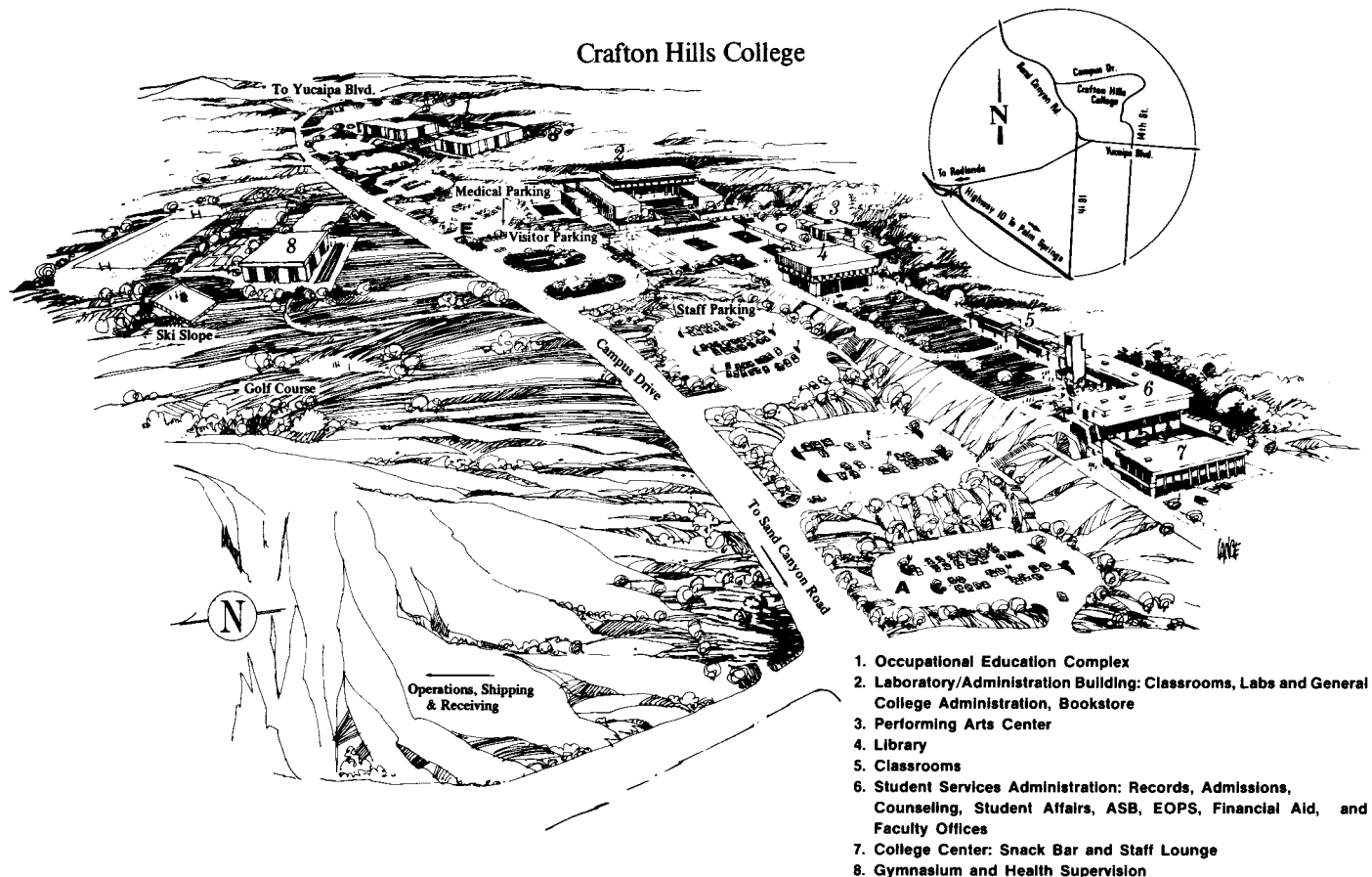
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Crafton Hills College



1. Occupational Education Complex
2. Laboratory/Administration Building: Classrooms, Labs and General College Administration, Bookstore
3. Performing Arts Center
4. Library
5. Classrooms
6. Student Services Administration: Records, Admissions, Counseling, Student Affairs, ASB, EOPS, Financial Aid, and Faculty Offices
7. College Center: Snack Bar and Staff Lounge
8. Gymnasium and Health Supervision

CRAFTON HILLS COLLEGE

1979-1980

A PUBLIC COMMUNITY COLLEGE IN CALIFORNIA

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SAN BERNARDINO COMMUNITY COLLEGE DISTRICT

BOARD OF TRUSTEES

Carleton W. Lockwood	
Jim Ballard	Allen B. Gresham
Lois J. Carson	Donald W. Hunt
William Claypool, III	Edward F. Taylor

DISTRICT ADMINISTRATION

Raymond F. Ellerman, Ed.D.	Chancellor
William L. Grigsby, M.A.	Vice Chancellor
Terry W. Spears, M.B.A.	Director, Business Services
Winston W. Carl, M.A.	Personnel Officer
Robert D. Kirk	Director, Computer Center
Dennis Farhar	Director, Financial Aids
Carolyn Nemeth, B.A.	Accounting Officer

CRAFTON HILLS COLLEGE ADMINISTRATION

William J. Moore, Ph.D.	President
Joy Swan, Ph.D.	Assistant to the President Instructional Services and Occupational Education
Don A. Yowell, M.A.	Dean, Student Personnel Services
Edward L. Chapin, Jr., Ph.D.	Dean, Continuing Education
Patricia F. Parsons, Ph.D.	Assistant Dean, Student Personnel Services
John Harder, B.A.	Director, Community Services and Public Information

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CRAFTON HILLS COLLEGE

1979-1980 academic year

fall semester 1979

August 27-31, September 5,6	Registration—Program Advisement
September 3	HOLIDAY—Labor Day
September 5	Fall Semester Begins (Faculty)
September 10	Instruction Begins
November 12	HOLIDAY—Veterans Day
November 22-23	Thanksgiving Recess
December 24-January 4	Christmas Recess
January 8-19	Final Examinations—Evening College
January 22-29	Final Examinations—Day College
February 1	End of Fall Semester

spring semester 1980

January 23,24,28-31	Registration—Program Advisement
February 4	Instruction Begins
February 12	HOLIDAY—Lincoln's Birthday
February 18	HOLIDAY —Washington's Birthday
April 7-11	Spring Recess
May 26	HOLIDAY-Memorial Day
May 28-June 9	Final Examinations—Evening College
June 5-12	Final Examinations—Day College
June 13	Commencement
June 13	End of Spring Semester

summer session 1980

June 16-19	Registration—Program Advisement
June 23	Instruction Begins
July 3	HOLIDAY—Independence Day
August 1	End of Six-Weeks Session
August 15	End of Eight-Weeks Session

1979

S M T W T F S	S M T W T F S	S M T W T F S
JANUARY	FEBRUARY	MARCH
1 2 3 4 5 6	1 2 3	1 2 3
7 8 9 10 11 12 13	4 5 6 7 8 9 10	4 5 6 7 8 9 10
14 15 16 17 18 19 20	11 12 13 14 15 16 17	11 12 13 14 15 16 17
21 22 23 24 25 26 27	18 19 20 21 22 23 24	18 19 20 21 22 23 24
28 29 30 31	25 26 27 28	25 26 27 28 29 30 31
APRIL	MAY	JUNE
1 2 3 4 5 6 7	1 2 3 4 5	1 2
8 9 10 11 12 13 14	6 7 8 9 10 11 12	3 4 5 6 7 8 9
15 16 17 18 19 20 21	13 14 15 16 17 18 19	10 11 12 13 14 15 16
22 23 24 25 26 27 28	20 21 22 23 24 25 26	17 18 19 20 21 22 23
29 30	27 28 29 30 31	24 25 26 27 28 29 30
JULY	AUGUST	SEPTEMBER
1 2 3 4 5 6 7	1 2 3 4	1
8 9 10 11 12 13 14	5 6 7 8 9 10 11	2 3 4 5 6 7 8
15 16 17 18 19 20 21	12 13 14 15 16 17 18	9 10 11 12 13 14 15
22 23 24 25 26 27 28	19 20 21 22 23 24 25	16 17 18 19 20 21 22
29 30 31	26 27 28 29 30 31	23 24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
1 2 3 4 5 6	1 2 3	1
7 8 9 10 11 12 13	4 5 6 7 8 9 10	2 3 4 5 6 7 8
14 15 16 17 18 19 20	11 12 13 14 15 16 17	9 10 11 12 13 14 15
21 22 23 24 25 26 27	18 19 20 21 22 23 24	16 17 18 19 20 21 22
28 29 30 31	25 26 27 28 29 30	23 24 25 26 27 28 29 30 31

1980

S M T W T F S	S M T W T F S	S M T W T F S
JANUARY	FEBRUARY	MARCH
1 2 3 4 5	1 2	1
6 7 8 9 10 11 12	3 4 5 6 7 8 9	2 3 4 5 6 7 8
13 14 15 16 17 18 19	10 11 12 13 14 15 16	9 10 11 12 13 14 15
20 21 22 23 24 25 26	17 18 19 20 21 22 23	16 17 18 19 20 21 22
27 28 29 30 31	24 25 26 27 28 29	23 24 25 26 27 28 29 30 31
APRIL	MAY	JUNE
1 2 3 4 5	1 2 3	1 2 3 4 5 6 7
6 7 8 9 10 11 12	4 5 6 7 8 9 10	8 9 10 11 12 13 14
13 14 15 16 17 18 19	11 12 13 14 15 16 17	15 16 17 18 19 20 21
20 21 22 23 24 25 26	18 19 20 21 22 23 24	22 23 24 25 26 27 28
27 28 29 30	25 26 27 28 29 30 31	29 30
JULY	AUGUST	SEPTEMBER
1 2 3 4 5	1 2	
6 7 8 9 10 11 12	3 4 5 6 7 8 9	1 2 3 4 5 6
13 14 15 16 17 18 19	10 11 12 13 14 15 16	7 8 9 10 11 12 13
20 21 22 23 24 25 26	17 18 19 20 21 22 23	14 15 16 17 18 19 20
27 28 29 30 31	24 25 26 27 28 29 30 31	21 22 23 24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
1 2 3 4	1	
5 6 7 8 9 10 11	2 3 4 5 6 7 8	1 2 3 4 5 6
12 13 14 15 16 17 18	9 10 11 12 13 14 15	7 8 9 10 11 12 13
19 20 21 22 23 24 25	16 17 18 19 20 21 22	14 15 16 17 18 19 20
26 27 28 29 30 31	23 24 25 26 27 28 29 30	21 22 23 24 25 26 27 28 29 30 31

CRAFTON HILLS COLLEGE FOUNDATION

The Crafton Hills College Foundation acts as a tax-exempt organization to receive gifts of both real and personal property as a basis for extending educational opportunities to students via scholarships, grants, loans, and other types of assistance.

BOARD OF DIRECTORS

President	Donald W. Hunt
Vice President	N. A. McAnally
Secretary	Dr. William J. Moore
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Treasurer	Winston W. Carl
Asst. Treasurer	William L. Grigsby
Member	Ruben Finkelstein
Member	Harold Hartwick
Member	Judge Margaret J. Morris
Member	Evan F. Skeen
Member	Edward F. Taylor

FACULTY

The dates in parentheses indicate the year of appointment with the San Bernardino Community College District.

- ALLEN, JOSEPH T., JR.** (1954) Anthropology/Geology
Professor
 B.A., B.S., University of Alabama
 M.A., John Hopkins University
- ARIAS, RONALD F.** (1971) English
Associate Professor
 B.A., M.A., University of California, Los Angeles
- ARTHUR, GLEN E.** (1950) Agriculture
Assistant Professor
 B.S., California State Polytechnic University
- BAGGETT, OLEN G., JR.** (1965) Physical Education
Professor
 B.A., M.A., California State University, Los Angeles
- BISI, JAMES G.** (1968) Counseling
Associate Professor
 B.S., California State College (PA.)
 M.A., California State University, San Jose
- BLUME, HARRIET C.** (1979) Foreign Language
Instructor
 Diplôme de littérature Francaise Contemporaine,
 University of Paris
 M.A., University of Redlands
- BOARDMAN, DORIS E.** (1961) Library
Professor
 B.A., Texas Women's University
 M.S., in L.S., University of Southern California
- BOOTH, RICHARD** (1972) English
Associate Professor
 B.A., University of California, Santa Barbara
 M.A., California State University, San Diego
- BRAINARD, CEYLON ANTHONY** (1976) Respiratory Therapy
Assistant Professor
 A.A., Cuesta Junior College
 A.S., Cuyahoga Community College, Ohio

- CABANILLA, CLIFFORD D.** (1966) Speech/Theatre Arts
Associate Professor
 B.S., M.A., Brigham Young University
- CARRION, NESTOR A.** (1976) Graphic Design
Instructor
 B.A., LaVerne College
- CARTER, MARIAN T.** (1970) Reading/Speech/Psychology
Associate Professor
 B.A., M.S., University of Omaha
- CHAPIN, EDWARD L., JR.** (1953)
Dean, Continuing Education
 B.A., California State University, Fresno
 M.A., Ph.D., University of California, Los Angeles
- CORREIA, ELAINE B.** (1977) Microbiology/Biology
Assistant Professor
 B.S., State University of New York, Albany
 M.A., California State University, Fullerton
- DE SALLIERS, DEBORAH** (1976) Physical Education
Assistant Professor
 B.S., Pepperdine University
 M.S., University of California, Los Angeles
- DREW, DEBORAH D.** (1976) English
Instructor
 B.A., California State University, Fresno
 M.A., California State University, Los Angeles
- GALBRAITH, ROBERT T.** (1967) Biology/Oceanography
Professor
 B.A., University of California, Santa Barbara
 M.A., California State University, Long Beach
- GATCHEL, RICHARD H.** (1971) Philosophy/Religious Studies
Associate Professor
 B.D., Union Theological Seminary
 B.A., Ph.D., Stanford University
- GAUSTAD, VIRGINIA M.** (1970) Secretarial
Associate Professor
 B.B.A., Baylor University
 M.A., University of Redlands
- GONZALEZ, RAYMOND** (1972) Foreign Language
Associate Professor
 B.A., M.A., University of California, Riverside

- GRIFFITH, BARTON L. (1976)** Marketing & Business Administration
Assistant Professor
 B.S., University of Denver
 M.A., Northern Colorado State University
- GRUB, KENNETH L. (1965)** History
Associate Professor
 B.A., M.A., University of Colorado
- HARWELL, JACK L. (1968)** Sociology
Associate Professor
 B.A., M.A., California State University, San Jose
 Ph.D., United States international University
- HOLTKE, GERALD A. (1975)** Accounting
Assistant Professor
 B.B.A., University of Cincinnati
 M.B.A., University of Santa Clara
- HOYT, WILLIAM H. (1955)** Physical Education
Professor
 B.S., M.A., University of California, Los Angeles
- HULTEN, GARY A. (1974)** Respiratory Therapy
Assistant Professor
 A.S., San Bernardino Valley College
- JONG, LINDA P. (1972)** Mathematics
Associate Professor
 B.S., Chiao-tung University
 B.S., Hong Kong Baptist College
 M.S., California State University, Los Angeles
- KOSMATKA, ARNOLD L. (1978)** Respiratory Therapy
Instructor
 A.A.S., Southern Oregon State College
- LAMBERT, CLARENCE D. (1965)** Chemistry
Professor
 B.S., Utah State University
 M.S. University of Utah
- LYMAN, PAMELA M. (1977) (Part-time)** College Nurse
 B.S., Brigham Young University
- MCCUNE, RONALD M. (1977)** Emergency Medical Care
Assistant Professor
 B.A., Pepperdine University

- MOORE, WILLIAM J. (1956)**
President
 B.A., M.A., University of Redlands
 Ph.D., Inter-Collegiate Program of Graduate Studies-
 University of Redlands. Claremont Graduate School
- NEUMAN, VIOLET H. (1976)** Counseling
Assistant Professor
 B.S., Northern Illinois University
 M.A., California State College, San Bernardino
- ORR, BILL (1971)** Mathematics
Associate Professor
 B.S. Cal-Poly, Pomona
 M.S., University of Oregon, Eugene
- PARSONS, PATRICIA F. (1971)**
Assistant Dean, Student Personnel Services
 B.A., Connecticut College for Women
 M.A., Ph.D., Claremont Graduate School
- QUINVILLE, HELEN (1977) (Part-time)** College Nurse
 B.S., University of California, Berkeley
 M.A., Columbia University, New York
- SCHULING, WALTER C. (1964)** Political Science/History
Professor
 B.Ed., Bemidji State University
 M.A., Ph.D., University of Minnesota
- SHIELDS, ANDREA L. (1971)** Psychology
Associate Professor
 B.A., University of Arizona
 M.A., University of the Pacific
- SMITH, NORMAN D. (1972)** Music
Associate Professor
 A.B., University of California, Los Angeles
 M.A., University of Redlands
- STEWART, V. DEAN (1950)** Chemistry
Professor
 B.S., Wilmington College
 M.S., University of Denver
- SWAN, JOY (1977)**
**Assistant to the President, Instructional
 Services and Occupational Education**
 B.A., M.A., California State University, Los Angeles
 Ph.D., University of Southern California

- THOMAS, L. PATRICIA** (1978) Emergency Medical Care
Assistant Professor
 B.A., M.A., University of Redlands
- THURMAN, LAURENS K.** (1972) Physics
Associate Professor
 B.A., M.A., University of California, Riverside
- WILKERSON, RICHARD L.** (1975) Learning Center/English/Psychology
Assistant Professor
 B.A., M.A., University of Redlands
- WRIGHT, WILLIAM R.** (1977) Auto Body/Automotive Technology
Assistant Professor
 B.V.E., M.A., California State University, Los Angeles
- WURMBRAND, MARC** (1972) Art
Assistant Professor
 B.F.A., Cooper Union
 M.F.A., Yale University
- YOWELL, DON A.** (1972)
Dean, Student Personnel Services
 B.S., M.A., California State University, Long Beach

PROFESSORS EMERITI

- H.D. ANDERSON** (1946-1978) Foreign Language
- ROGER C. ANTON** (1946-1976) President
 Named Professor Emeritus (posthumously) by the Board of Trustees,
 June 3, 1977.
- GEORGE ASHTON** (1957-1978) History
- JOSEPHINE E. BROHOLM** (1947-1975) Speech
- HAROLD B. PIGOTT** (1946-1975) English

SECTION I

GENERAL INFORMATION

Two public community colleges serve the San Bernardino Community College District - Crafton Hills College and San Bernardino Valley College. Both are tax-supported, two-year California community colleges governed by a locally-elected Board of Trustees, acting through the Chancellor of the District and the President of each college.

Crafton Hills College is a fully accredited, coeducational and comprehensive community college offering day, evening and summer programs of transfer education as well as occupational, vocational and technical training.

The college campus is located on 523 acres in Crafton Hills, midway between Redlands and Yucaipa, approximately 11/2 miles north of Interstate 10.

The college met its first classes in September 1972 and has undergone steady growth from that time. The original three building complexes have grown to six with the completion of a new Performing Arts Center. Construction is underway on a Science and Allied Health Occupations building due to be ready for use in 1980.

Crafton Hills College is supported principally by the taxpayers of the San Bernardino Community College District. The District is comprised of the unified school districts of Bear Valley, Colton, Needles, Redlands, Rialto, Rim of the World, San Bernardino and Yucaipa.

Residents of other California community college districts may need to secure an interdistrict permit prior to registration.

Out-of-state and foreign students are charged tuition.

Enrollment patterns and projections indicate a continued steady growth with supporting staff and facilities developing to accommodate approximately 4,000-4,500 full-time students.

EDUCATIONAL PHILOSOPHY

Crafton Hills College is dedicated to the worth and dignity of each individual and attempts to provide an environment for personal interaction and achievement, a campus of learning, a community in which all are students. Crafton Hills College accepts the responsibilities of a community college as an equal partner in the system of higher education in California.

The College strives to provide equal opportunities for an education commensurate with individual abilities, interests, goals, and needs. Our conviction reflects, encourages, and promotes the ideals of American life, free and critical thinking, qualitative accomplishment through the maintenance of high but fair standards, mutual exchange between community and college, cultivation of ethical values and attitudes toward our society. Responsible leadership seeks responsive expression through a strong faculty, integrating learning experiences and skills with insight and understanding of knowledge as a whole.

OBJECTIVES AND FUNCTIONS OF CRAFTON HILLS COLLEGE

The principal objective of Crafton Hills College is to facilitate students' learning so that they can attain realistic goals, commensurate with their needs and abilities. The primary means for achieving this goal is the educational program of the College: all other functions of the College are justified insofar as they support learning. While the result of some learning is intangible, most learning is indicated by a change in the attitude and behavior of the learner. Some changes represent new departures for the student: others are simply further refinements and developments of skills, viewpoints, and knowledge.

The College has provided a variety of courses and programs designed to reach the institution's basic goal. As students pursue their programs of study, they should strive toward an understanding of their scientific and cultural heritage, the ability to define and solve problems on the basis of relevant facts and reasonable alternatives, the identification of a preferred pattern of living and a means of achieving it, occupational and professional proficiency, mental and physical health, the ability to interact effectively with other people intellectually, socially, and physically, the acceptance of responsibility for themselves, an awareness of the usefulness and desirability of further learning.

In pursuit of the goals stated above, the College offers course work and assistance to the students in the following broad areas:

1. lower division preprofessional curriculum for transfer to senior universities, applicable toward the baccalaureate degree;
2. general education which provides a fundamental learning foundation and stimulates intellectual curiosity;
3. occupational fields for entry into specific vocations and further training for increasing occupational effectiveness while pursuing a vocation;
4. continuing education for citizens in the community who may desire further preparation in general education, in a vocational field, or in an avocational venture;
5. advising and counseling for students in their educational, occupational, and personal planning; and
6. community services which encourage the residents of the community to use college resources for cultural and recreational activities.

DAY, CONTINUING EDUCATION, AND SUMMER PROGRAMS

Crafton Hills College offers day, continuing education, and summer session courses. It operates on the semester plan.

Many courses, both transfer and terminal, are duplicated in the day and continuing education programs for the convenience of working students.

Summer session courses are intensive. They are designed for transfer, for makeup of high school deficiencies, and to allow the student to explore new fields of knowledge or to accelerate his academic progress. Because of the intensive nature of the program, a student is ordinarily allowed to enroll in no more than six units during summer session.

CONTINUING EDUCATION

The Continuing Education Program of Crafton Hills College includes a program of classes not only during the evening hours, on and off campus, but also off campus during the day. The purpose of these expanded course offerings is to enable both the youth and the adults to carry on a college program leading to an Associate Degree from Crafton Hills College or to transfer to a four-year institution. In addition, the program offers courses designed for the personal and occupational improvement of youth and adults.

A combined schedule of classes, day and evening, is planned for each semester. When advisable, some types of classes are offered at any time during the semester and may be of varying length. Most classes meet once or twice a week for one, one and one-half, two or three hours, depending upon the content and nature of the course.

The Continuing Education Program is an integral part of the total College program. However, its curriculum does not in each case duplicate that of the Day College. A different philosophy and different procedures and techniques are often employed to meet the special needs of students.

COUNSELING SERVICES

The College offers a complete counseling service. The program is designed to expedite and ease the student's transition from high school and his adjustment to college. The Counseling Center is staffed by professionally trained counselors and provides educational, vocational, and personal counseling.

As a supplement to the Counseling Center, students will find a faculty-centered advisement program at Crafton Hills College. The goal of the advisement program is to help students develop self-directed program planning and competent, realistic college career decisions. Counseling and Guidance functions are closely integrated with admission activities in order to structure the appropriate guidance processes at the appropriate time and to encourage personal initiative.

ACCREDITATION

Crafton Hills College is fully accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges.

GENERAL REGULATIONS

RULES OF STUDENT CONDUCT

Section 22635 of the California Education Code states:

"The Regents of the University of California, the Trustees of the California State Colleges, and the governing board of every junior college or school district maintaining a junior college, shall adopt or provide for the adoption of specific rules and regulations governing student behavior along with applicable penalties for violation of such rules and regulations. Every student at such institutions of higher education shall, at the time of registration for a semester or quarter, as the case may be, at such

institutions, be provided with a copy of such rules and regulations together with a statement of the applicable penalties which may be incurred by violation thereof. The Regents of the University of California, the Trustees of the California State Colleges, and the Governing Board of every junior college or school district maintaining a junior college shall provide for the distribution of any revision of such rules and regulations to students enrolled in such institutions."

CRAFTON HILLS COLLEGE CODE OF CONDUCT

It is expected that college students are capable of conducting themselves in accordance with the rules and policies of Crafton Hills College, the San Bernardino Community College District Board of Trustees, and the California Education Code. Copies of the State Education Code and District Policy are available in the Library. Crafton Hills College rules and regulations are contained in the student handbook available in the registration area and in the student activities office.

Violations of local college and district rules, regulations and policies and/or state laws which occur on the campus are punishable by probation, suspension, or expulsion from the College. Any punitive action may be appealed through the grievance procedure described in the student handbook.

FAMILY EDUCATIONAL RIGHTS & PRIVACY ACT OF 1974

(P.L. 93-380, Section 438)

Federal and state law does not permit access to or release of any information contained in student educational records to any unauthorized party or agency without proper court orders or signed waivers from the individual involved.

Crafton Hills College maintains a student record for everyone admitted which relates to request for admission, transcripts of college work attempted, semester class enrollment data, placement test data, requests for financial assistance while attending college, student health information, VA authorization benefit forms. The College does not maintain a public directory.

Crafton Hills College students have the right to review their educational records at any time the Admissions and Records Office is open. This office is extremely busy at certain times during the year and students will be invited to wait until records are computed and transcripts updated. The first two copies of permanent records are reproduced at no charge. A minimal fee is required for additional copies.

Students may challenge the content of records by filing the proper petition. Grade revisions can only be changed by the instructor of record unless there is an administrative error through computer keypunching. The college administrator in charge of record maintenance at Crafton Hills College is the Dean of Student Personnel Services, Student Services Bldg., Rm. 303.

Crafton Hills College intends to rigidly adhere to the provision of these laws. On occasion, the college will publicize student names that relate to certain activities. programs, intramurals. commencement, etc. The Educational Privacy Act does not apply to those students voluntarily publishing personal articles in the college newspaper. If you do not wish your name to appear in materials referring to the above events, please complete the Privacy Act card during registration.

ELIGIBILITY FOR ADMISSION ADMISSION OF HIGH SCHOOL GRADUATES

The College admits, without examination, the graduate of any high school. Students who have passed the California High School Proficiency Examination are considered high school graduates. Applicants must present the Certificate of Proficiency at the time of registration to be eligible for admission. A duplicate copy is required for the student's permanent record.

ADMISSION OF OTHER THAN HIGH SCHOOL GRADUATES

Every person who has not graduated from high school is eligible for admission. However, these applicants must be at least eighteen years of age, and be capable of doing college work. Any person who has served in the Armed Forces of the United States is eligible for admission.

ADMISSION OF HIGH SCHOOL STUDENTS

High school students in their junior or senior year, upon written authorization of their principal and approval of the Dean, Student Personnel Services, may enroll as special part-time students.

This advanced placement program is designed to introduce motivated high school students to a college environment when, in the judgment of their principal and the Dean of Student Personnel Services, the student can profit from the experience.

Units earned will apply toward the requirements of a college degree if not used for high school credit.

ADMISSION TO ADVANCED STANDING

Students from institutions of collegiate rank may be admitted with advanced standing upon the presentation of official transcripts and certificates of honorable dismissal from such institutions.

ADMISSIONS EXCEPTIONS

Exceptions to the above categories are made in the case of applicants whose legal residence is in a district which maintains a community college in the State of California other than San Bernardino Community College District (**see inside back cover**). Such applicants will not be admitted to Crafton Hills College without a permit, nor will students who are residents of San Bernardino Community College District be admitted to other community colleges in the State of California except on contract between the Boards of Trustees of the district of residence and the district of attendance.

INTERNATIONAL STUDENTS

Crafton Hills College is approved by the Immigration and Naturalization Service to admit nonimmigrant international students who are taking lower division work for transfer to four-year institutions or who are taking work to complete a two-year occupational major. The College requires the full completion of each of the following items:

After your application is reviewed and the college determines whether or not you are qualified for admission, you will be notified to complete the following steps by established deadlines:

A. Make arrangements to take the TOEFL (Test of English as a Foreign Language.) Copies of the TOEFL Bulletin of Information for Candidates are available at most American embassies. The application to take the TOEFL test must be received by educational testing service at least four weeks prior to the testing date. The applicant must demonstrate a knowledge of the English language sufficient to enable him to profit from instruction at Crafton Hills College.

B. A letter of reference verifying character, background and ability from past schools attended must be submitted along with official transcripts as soon as possible.

C. Applicants must submit official documentation of age and birthdate. Applicants under 18 years of age will not be admitted.

D. A recent personal photograph. Xerox copies are not acceptable.

E. Positive verification of a recent chest X-ray that indicates a negative tuberculosis test. This must be on file with the college before the student applicant will be admitted to classes. Skin test and/or chest X-rays taken in other than the United States are unacceptable.

After evaluation of all materials requested in Section II above, applicants will be mailed the current U.S. Immigration student visa for attendance at Crafton Hills College only. Applicants who are accepted will be required to be in the local area not later than August 15 for the Fall Semester and January 15 for the Spring Semester.

Report to the office of the Dean of Student Personnel services when you arrive in this area. You will then be directed to the Admissions and Records office to complete the regular student application and receive a registration appointment date and time. Contact the College Counseling Center at least one week prior to your registration appointment and complete your schedule of classes for the coming semester. Report to the College Gymnasium for registration and be prepared to pay all required tuition fees.

The college does not provide dormitory or living facilities on campus. International Students are responsible for locating their own housing in nearby communities.

International Students are permitted to attend Crafton Hills College for a maximum of five semesters. A continuous enrollment of 12 or more units per semester is required.

International Students are not permitted to work while attending college the first semester at Crafton Hills College. Students may work after the first semester if they have a 2.0, or better, grade point average in all units attempted.

In order to be considered for admission, all applicable materials must be submitted by July 1 for the Fall Semester, December 1 for the Spring Semester and April 15 for the Summer Session of the academic year for which application is being made.

Percentages of foreign students permitted to enroll may be limited at the discretion of the President of the College.

**RESIDENCE CLASSIFICATION PROCEDURE
(PURSUANT TO EDUCATION CODE, CHAPTER 1100)
RESIDENCY REQUIREMENT (ARTICLE III)**

In order to be classified as a resident for tuition purposes, a person must have been a legal resident of the State of California for more than one year immediately preceding the residence determination date for the term during which the person proposes to attend a California community college.

DETERMINATION OF RESIDENCE FOR TUITION PURPOSES

New and returning students of Crafton Hills College are classified for the purpose of determining the residence of each student for nonresident tuition purposes. The Application for Admission, and if necessary, other evidence furnished by the student is used in making these determinations. A student may not register and enroll in classes until his Application of Admission has been received by the Admissions Office.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law but a summary of the principal rules and their exceptions.

Legal residence may be established by an adult who is physically present in the state while, at the same time, intending to make California his permanent home. Steps must be taken at least one year prior to residence determination date to evidence the intent to make California the permanent home with concurrent relinquishment of the prior legal residence. Some of the relevant indicia of an intention to establish and maintain California residence may be established by registering to vote and voting in elections in California; satisfying resident California state income tax obligations on total income; ownership of residential property or continuous occupancy or letting of an apartment on a lease basis where one's permanent belongings are kept; maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in the military service, etc.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of his stay in California.

In general, the unmarried minor (a person under 18 years of age) derives legal residence from his/her father (or from his/her mother if the father is deceased), or, in the case of separation of the parents, from the parent with whom the minor maintains his/her place of abode. The residence of a minor cannot be changed by act of the minor or that of the minor's guardian, so long as the minor's parents are living.

A man or a woman may establish his or her residence; marriage is not a governing factor.

The following general summary of the principal rules on residency and their exceptions are not to be construed as the actual expression of the laws used by Crafton Hills College admissions officers for residence determination. Reference should be made to the Education Code, regulations of the Board of Governors of the California Community Colleges and Title 5 of the California Administrative Code. In addition, regulations and guidelines are available at the Office of Admissions.

Legal residence may be established by an adult who is physically present in the state while, at the same time, intending to make California his/her permanent home.

Steps must be taken at least one year prior to the residence determination date to evidence the intent to make California one's permanent home with concurrent relinquishment of the prior legal residence. Some of the relevant indications of intention to establish and maintain California residence are satisfying resident California state income tax obligations on total income; registering to vote and voting in elections in California; maintaining a permanent military address and home of record in California if one is in the military service.

In general the unmarried minor (a person under 18 years of age) derives legal residence from his/her parents, or, in the case of permanent separation of the parents, from the parent with whom the minor lives.

A student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a resident student for tuition purposes. The residence determination date is that day immediately preceding the opening day of instruction of the semester or term.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of his stay in California.

Exceptions to the preceding summary include the following:

1. Persons below the age of 19 whose parents were residents of California, but who left the state while the student who remained was still a minor. When the minor reaches age 18, the exception continues for one year to enable the student to qualify as a resident student.
2. Persons below the age of 19 who have been present in California for more than a year before the residence determination date and have been entirely self-supporting for that period of time.
3. Persons below the age of 19 who have lived with and have been under the continuous direct care and control of an adult, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year.
4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year. The exception, once attained, is not affected by transfer of the military persons directly to a post outside the 50 states and District of Columbia.
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for a year.
6. A student who is an adult alien is entitled to residence classification if he has been lawfully admitted to the United States for permanent residence in accordance with all applicable provisions of the laws of the United States; provided, however, that the student has been in residence in California for more than one year after such admission prior to the residence determination date. A student who is a minor alien shall be entitled to residence classification if both he/she and the parent from whom residence is derived have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has had residence in California for more than one year after acquiring such permanent residence prior to the residence determination date of the term for which the student proposes to attend the college.
7. A student holding a valid credential authorizing service in a public school and employed in a certificated full-time position by a community college district, will be given resident classification.

8. A student who is a full-time employee of an educational institution of higher learning, or whose parent or spouse is a full-time employee, will be entitled to resident classification until he/she has resided in the state the minimum time necessary to become a resident.

RESIDENCE CLASSIFICATION PROCEDURES

Residence classification of all students shall be made for each term. A student's status as a resident or nonresident is determined by the admissions officer. Classifications shall be based on evidence deemed necessary by the college district and such further evidence of residence as the student wishes to submit. The Statement of Legal Residence may be required to be signed under oath by the student before a Notary Public; and if further information is required, it may be necessary to provide it under oath, by declaration or affidavit.

ADMISSION REQUIREMENTS

Any high school graduate or any person 18 years or older is eligible for admission to Crafton Hills College. Upon approval of high school authorities, high school juniors (who have started the 11th grade) and seniors may enroll in college courses.

California Residence: A person living anywhere within the San Bernardino Community College District may attend Crafton Hills College providing their legal address is in the district. Generally, college residency status is established if:

1. The applicant is under 18 years, the parents must currently reside within the college district and must have resided within the State of California for 12 consecutive months preceding the first day of the semester.
2. The applicant is 18 but not yet 19 years of age, the applicant must reside within the college district and both the applicant and the applicant's parents must have resided within the State of California for 12 consecutive months preceding the first day of the semester.
3. The applicant is 19 years or older, the applicant must currently reside within the college district and must have resided within the State of California for 12 consecutive months preceding the first day of the semester.

Applicants living in other community college districts should check with their home districts to determine if interdistrict permits are required.

Non-California Residents: Out-of-state applicants may be admitted to Crafton Hills College under the following conditions:

1. Applicants who are not residents of the State of California as of the day immediately preceding the first day of classes, in any given semester or summer session, must pay nonresident tuition fees.
2. Military personnel and their immediate dependents are granted a one-year exemption from the out-of-state tuition fees, provided they are in California for reasons other than educational assignment.
3. Minors (under 18 years of age and not married) will be required to pay the out-of-state tuition fee if their parents or legal guardians reside outside of California even though such minors may have lived in the State of California for one year or more.

OPEN CLASSES

It is the policy of the San Bernardino Community College District that, unless specifically exempted by statute, every course section or class, the ADA of which is to be reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the colleges and who meets such prerequisites as may be established in compliance with Title 5 of the California Administrative Code (SBCCD Board Policy 6005.3).

GRIEVANCE PROCEDURES

The Office of the Assistant Dean, Student Personnel Services, located in the Student Services Building, provides assistance to students in disciplinary and grievance matters. Explanations concerning student rights and procedures in resolving grievances are given in "Students Rights and Responsibilities," available in the Office of the Assistant Dean, Student Personnel Services.

The designated coordinator for compliance with Section 504 of the Rehabilitation Act of 1973 for the Handicapped, as amended, and for compliance with Title IX prohibiting sex discrimination in schools and colleges is the Assistant Dean, Student Personnel Services. Any grievances concerning handicapped or sex discrimination may be referred for assistance to this office.

NONDISCRIMINATION

The San Bernardino Community College District is committed to nondiscrimination and to provide an equal opportunity for admission, student financing, student activities, and employment regardless of race, color, religion, sex, age, handicapped status or national origin. Inquiries regarding the application of this Board policy may be directed to Assistant Dean, Student Personnel Services.

COMPLETION OF HIGH SCHOOL GRADUATION

Students over 18 years of age who have not graduated from high school are urged to attend the Adult Education Division of their local high school in order to complete requirements for the high school diploma or General Educational Development Test.

In some instances, non-high school graduates may arrange to complete their high school diploma by attending classes at Crafton Hills College. The student must present a letter from the high school administration authorizing the student to attend classes at the College to be used for high school graduation. The letter must also include a list of the courses needed to complete the high school diploma requirements. Following completion of the listed requirements, the authorizing high school will then award the diploma.

All credits earned and applied to the high school diploma will not be counted toward the Associate degree.

VETERANS

Crafton Hills College has been approved for training of veterans under the various U.S. public laws and California veterans' enactments. A veteran will be certified to the Veterans Administration when the following is completed:

1. Requested the high school of attendance, and each college attended to send promptly official transcripts of record to the Office of Admissions.

2. Contacted the Office of Admissions in regard to completing an Application for Admission and forms needed for certification of his enrollment to the Veterans Administration.
3. Contacted a counselor for assistance in planning a program and has submitted a Veterans' Enrollment Card signed by a counselor.

At the time of printing, this catalog is a true and accurate compilation of the College curriculum, degree requirements and policies.

CREDIT FOR MILITARY EXPERIENCE

Students who have completed 18 or more units at Crafton Hills College and have served in the Armed Forces for a period of one year or longer, are eligible to apply for college credit for length of service. Upon presentation of discharge papers showing active service of one year or more in the United States Armed Forces, veterans will receive a total of 6 units of CR grades. Students in the six-month reserve training programs are not eligible for the 6 units of military credit.

Additional credit for USAFI and Military Service School experience may be earned in accordance with the recommendations of the American Council on Education and the current College policy. Students should inquire at the Counseling Center for complete information.

TRANSFER OF CREDIT

Credit will be allowed for college work completed in other accredited institutions. All work presented will be evaluated by the College Recorder and posted to the student's record.

FEES AND EXPENSES

Students should plan on spending between \$55.00 and \$75.00 per semester for textbooks, incidental supplies, Associated Student Body card, health service, and certain testing materials.

NONRESIDENT FEES

Students classified as nonresidents of California must pay a tuition per-unit cost established by the San Bernardino Community College District Board of Trustees in accordance with Section 25505.8 of the Education Code. The same tuition fee will be charged International Students. Exceptions to the nonresident status of prospective students are found in the Admissions and Record Office.

The nonresident tuition fee for the 1979-80 school year, effective for Summer Session registration shall be \$1290.00 (\$645.00 per semester) for students who carry 15 or more units. Students enrolling in fewer than 15 units will be charged \$43.00 per semester unit. Nonresident tuition fees are due and payable at the time of registration.

REFUNDS ON NONRESIDENT FEES

Under special circumstances, some or all of the nonresident fee may be refunded. In the event that the student withdraws completely from the College or that an error has occurred, nonresident fees may be refunded in accordance with the following conditions:

	Percentages Of Refund
1. Fees collected in error. Application must be made NO LATER THAN THE END OF THE SEMESTER FOR WHICH THE FEE IS PAID.	100
2. Withdrawal before classes begin or during the first week of instruction.	80
3. Withdrawal during the second week of instruction.	60
4. Withdrawal during the third week of instruction.	40
5. Withdrawal during the fourth week of instruction.	20
6. Withdrawal after the fourth week of instruction.	0

Students who pay a nonresident fee and who drop one or more classes but continue in other classes will not be given a refund.

Application for refund of nonresident fees is made in person in Room A303 of the Student Services Building.

GRADUATION REQUIREMENTS

Graduation from Crafton Hills College usually requires two years of full-time study, and may lead to an Associate in Arts Degree or an Associate in Science Degree. Requirements are in accordance with California Administrative Code, Title V, Chapter 8.

Students interested in earning a second associate degree are advised to consult with the Counseling Center concerning current College policy.

CRAFTON HILLS COLLEGE PROPOSED NEW GRADUATION REQUIREMENTS

Associate Degree

Requirements for the Associate in Arts Degree:

1. Completion of a minimum of 60 units acceptable college work with at least a "C" or better grade point average.
2. Completion of eighteen (18) semester units of study, constituting a major in a discipline or related disciplines as identified by the college catalog. All occupational majors must complete 18 semester units in a specific field. The proper major for a transfer student is completion of the general education requirements, plus the lower division requirements for their four year program.
3. Completion of eighteen (18) semester units in residence at Crafton Hills College.
4. Demonstrated reading capability at the 30th percentile, or higher, on Nelson-Denny test, or completion of a reading course with a grade of C or higher. Students who have not taken the Nelson-Denny test may contact the Learning Resource Center for an appointment to take this 40 minute test at any time during the semester. Students are encouraged to obtain the scores from this test as early as possible in their college careers.
5. Math proficiency demonstrated at the 10th grade level or higher, on basic math test, or completion of Math 051 (or higher level course) with a grade of C or better.
6. The following restrictions apply to the 60 units required for graduation:
 - a. a maximum of 4 units of physical education activities may be applied.

- b. a maximum of 15 units of CR grades may be applied. No course in the student's major or required for his major may be taken for CR. For those students who complete courses for credit (CR) and subsequently declare a major in that course of study the rule may be waived.
 - c. a maximum of 6 units of Psychology 025 may be applied.
 - d. the following topic courses in any discipline shall be excluded from satisfying the general education requirement for the Associate Degree; work experience, selected topics, special studies, special problems, independent study.
7. Completion of 21 semester units of General Education. All courses within the listed subject areas, except those noted, may be used for General Education. The General Education requirement MUST include a minimum of 3-6 units in each of the areas of Natural Sciences, Humanities, Social Sciences and Learning Skills, and 3 units in English.
- a. **Natural Sciences** (3-6 units)
 - Anatomy/Physiology 150, plus Microbiology 150*
 - Biology (except 050 & 155)
 - Chemistry
 - Geography 110, 114 (only)
 - Geology
 - Oceanography
 - Physics
 - Astronomy

*Anatomy/Physiology 150 and Microbiology 150 fulfills the Natural Science requirements for Health Science majors only.
 - b. **Humanities** (3-6 units) must take at least one course from section i.
 - i. Art 100, 102, 105 and 108
 - Foreign Language 185, 225, 235, 236, 242, 244 (all) list
 - History 153, 160, 161, 163, 166, 167, 174, 175, 179 (only) **
 - Interdisciplinary Studies
 - Music 100, 120, 121, 124, 125
 - Philosophy
 - Religious Studies
 - Theatre Arts 100, 108, 109
 - English - except 001, 015, 100, 140, 144, 234, 235
 - **May also be used for Social Science
 - ii. Applied Arts
 - Art, Music or Theatre Arts majors may not use applied courses to fulfill the Humanities requirement.
 - Art: All courses may apply except 100, 102, 105, 108
 - Music: All courses may apply except 100, 120, 121, 124, 125
 - Theatre Arts: All courses may apply except 100, 108, 109
 - c. **Social Science** (3-6 units)
 - Anthropology
 - Economics
 - Geography (except 114)
 - History***
 - Political Science
 - Psychology (except 025 and 050)
 - Sociology (except 239-240)

***Some courses may also be used for Humanities

- d. English requirement of 3 units from the following courses: English 015, 100, 144.
- e. Learning Skills (3-6 units)
 - Business Administration 052
 - Computer Information Sciences
 - English 001, 002, 011
 - Foreign Language 150, 151, 155, 160, 161, 165, 175, 210 (only)
 - Math 001, 051
 - Philosophy 103 (only)
 - Speech

NOTE: No single course may be used to meet requirement No. 7 in more than one category.

ASSOCIATE IN SCIENCE DEGREE

Requirements for the Associate in Science Degree:

1. Completion of all requirements for the Associate in Arts degree.
2. A major of at least 18 semester units in the field of Natural Science', or an occupational curriculum.

*A minimum of 1 life science with lab and 1 physical science with lab are required.

GRADING

There are seven grades which the instructor may assign to indicate his evaluation of a student's performance in the course of study at the end of the course. The grades and their meaning are as follows:

A ==	Excellent	4 grade points per unit
B ==	Good	3 grade points per unit
C ==	Satisfactory	2 grade points per unit
D ==	Barely Passing	1 grade point per unit
F ==	Failure	0 grade points per unit
*CR	Credit; satisfactory or better	Units applicable toward graduation but not computed in grade-point average.
NCR ==	No Credit; no grade points	Not computed in grade-point average.

*A student may take up to fifteen units of credit (CR) courses to apply to his/her graduation requirements. However, no course in the student's major or required for his/her major may be taken for credit (CR). The units obtained from such courses will not be included in the grade-point average. A student must declare his/her intention for credit (CR) by filing a petition with the course instructor any time during the semester but prior to the final examination.

DESIGNATION OF WITHDRAWAL AND INCOMPLETES

Students withdrawing from classes or college before the first census period will not have a college transcript. Students withdrawing between the first and second census period will have a "W" recorded on their transcripts. If a student is dropped or withdraws between the second census period and the end of the 15th week of a full-term course, a "W" is recorded on the permanent record. After the 15th week,

students will not be permitted to withdraw from any course with a "W". Instructors will assign a grade or an incomplete (X) in those instances when students leave classes after the 15th week. Students have one academic year to make up course incompletes. After one year, the "X" will become a "W" on the transcript.

Students attempting to withdraw after the second census withdrawal date should be aware of the following:

An incomplete (X) will be issued unless the instructor assigns a letter grade, including CR/NCR, for the course(s).

Exceptions to this standard procedure are identified in the following step:

Extenuating Circumstances

Extenuating circumstances are verified cases of accidents, illness, reassignment of employment hours or locations, extreme, continued weather conditions, other circumstances beyond the student's control.

The student must provide documentation, other than his/her statement, in order to receive an exception to the incomplete status. This must be done before the end of the semester in which the extenuating circumstance is claimed.

Extenuating circumstances must be approved by the Dean of Student Personnel Services. Appropriate changes may become necessary in order to update the student's permanent record. All attachments and records will be placed in the student's permanent folder.

WITHDRAWAL FROM CLASSES OR COLLEGE

If it becomes necessary for a student to withdraw from College, he/she should obtain a withdrawal form from the Admissions office. A student who wishes to drop one or more classes, but who wishes to continue enrollment in other classes, should use a Student Withdrawal form to be obtained from the Admissions office. In both instances, the completed form with required signatures should be returned to the Admissions office.

LEAVE OF ABSENCE

A leave of absence may be granted to the student for a period of one week. If the conditions for the leave of absence continue beyond the one-week period, the Counseling office will be notified to assist in appraising whether the student shall continue with all his/her units, reduce the number of units, or withdraw from the College. Leaves of absence will be granted after the fifteenth week of instruction only under extreme circumstances. A leave of absence does not relieve the student of complying with an instructor's assignments. The responsibility for seeing that the work is made up satisfactorily rests upon the student.

EXAMINATIONS

Final examinations, or their equivalent, are normally given in all courses during the scheduled final examination period. Students may not be excused from the required examinations of any course.

Any student who purposely absents himself/herself from an examination at any time during a semester forfeits the right to make up work by reexamination.

RECORDING OF GRADES

A grade, once entered on the official transcript, remains a permanent part of the student's record. Courses in which grades of "D" or "F" were received may be repeated. The units for which credit is given will count only once toward an Associate degree.

GRADE CHANGES

The College has established a policy on grading standards and practices whereby the instructor is the final authority on assignment of grades. When reported to the Records Office on the class roll book, grades represent the instructor's decision as to the student's achievement. Grade changes are initiated through the instructor from whom the grade was received.

CREDIT BY EXAMINATION

Currently enrolled students submitting evidence of extensive background and/or experience in a subject area and feeling that their knowledge of the area is equivalent to the course content of a currently approved course may make application for course credit by examination. The student must have completed 12 or more units at Crafton Hills College and must submit to the Assistant to the President's office a fully completed and signed Application for Credit by Examination for each course requested. Applications may be secured from the Records Office.

Credit by examination for foreign language courses may be granted only to students who take the next higher language course while in residence at Crafton Hills College, and only with the approval of the foreign language instructor.

Students will be charged a fee of \$5.00 per course for the administration of the examination.

Upon approval of the application by the Assistant to the President and payment of any necessary fees, approval will be forwarded to appropriate instructors to administer examinations and submit grades. Grades will be consistent with the grading system established by the College and summer session in which the examination is completed and will be submitted to the Records Office by the end of the semester or summer session in which the examination is completed.

COLLEGE POLICY ON CHEATING AND PLAGIARISM

It is the belief at Crafton Hills College that students are entitled to the best education that the College can make available to them and that they, their instructors, and their fellow students share responsibility for seeing that their education is honestly attained.

In keeping with this philosophy, each student is expected to exert his/her best and entirely honest effort toward attaining an education.

Every instructor has the responsibility and authority for dealing with such instances of cheating or plagiarism as may occur in his classes.

Cases of this nature may be heard by a grievance committee under the provision of Student's Rights, Responsibilities and regulations, adopted by the Board of Trustees on January 9, 1970. This committee, the Petitions Committee, was created to act on petitions related to probation, disqualification, and graduation requirements and/or other academic-related problems.

SCHOLASTIC STANDARDS

The purpose of the Standards for Academic Probation and Dismissal Policy is to ensure that students maintain satisfactory scholastic progress.

STANDARDS FOR PROBATION

A student shall be placed on academic probation when one or more of the following conditions exist:

1. The student's cumulative grade-point average falls below 2.00 in all units attempted which were graded on the basis of a grading scale.
2. The student who enrolls in at least 12 units and who receives NCR grades for one-half or more of all units attempted during a semester.
3. The student who enrolls in 12 or more units and who withdraws from one-half or more of the units in which he or she is enrolled. Exception: The student who withdraws from all units in which enrolled will not be placed on probation.
4. The student has been disqualified from another collegiate institution.

REMOVAL FROM PROBATIONARY STATUS

Students on probation shall obtain clear status any semester a cumulative grade-point average of 2.00 is attained and do not receive more than the allowable proportion of NC grades or W's. A student on probation may appeal this status by filing a request for special consideration with the appropriate scholastic standards committee.

DISQUALIFICATION

A student on academic probation shall be dismissed for one semester when one or more of the following conditions exist:

1. The student has earned a grade-point average of less than 1.75 in all units evaluated on a grade basis for three consecutive semesters of attendance.
2. The student has received NCR's for at least one-half of all units attempted for three consecutive semesters of attendance.
3. The student has withdrawn from at least one-half of all units attempted for three consecutive semesters of attendance.
4. Any combination of 1, 2 and 3.
5. The student is on academic disqualification from another collegiate institution.

READMISSION

Disqualified students may appeal their dismissal by filing a request for special consideration with the appropriate scholastic standards committee.

A student may be reinstated after one semester from the date of disqualification.

Students enrolled, following dismissal, shall be on probationary status and subject to dismissal.

If the grade-point average of a student readmitted after disqualification falls below 2.00 for the semester, the student may be disqualified for one year,

SCHEDULE LIMITATIONS

- Day: All regular full-time students are restricted to a maximum of 18 semester units each semester. Requests for an overload must be approved by the Counseling Center.
- Evening: Evening College students are restricted to a maximum of 9 semester units each semester. Requests for an overload must be approved by the Counseling Center.
- Summer Session: Summer Session students are restricted to a maximum of 1 semester unit for each week of instruction: e.g. 6-week session, 6 units permitted; 8-week session, 8 units permitted. Requests for an overload must be approved by the Counseling Center.

ATTENDANCE

Class Attendance

Regular and prompt attendance is expected of every student. Instructors may drop students who incur excessive unexcused absences. After a student has been dropped from a class for unexcused absences, reinstatement will be at the discretion of each instructor. A student who has been absent because of illness should report to his instructors on the day he returns to school.

Continuous Attendance and Graduation

A student in continuous attendance in the Day or Evening College, or one who does not have a break in attendance of over five years, may elect to meet either the graduation requirements in effect at the time of first entering the College or those in effect at the time of graduation.

READMISSION AND GRADUATION

A student who has had a break in attendance of over five years must meet the graduation requirements in effect at the time of readmission to the College or those in effect at the time of graduation.

TRANSFER STUDENTS AND GRADUATION

Transfer students who have been in continuous attendance in an accredited college must meet the graduation requirements that were in effect at the time of the student's first admission to Crafton Hills College or those in effect at the time of graduation.

AUDITING OF COURSES

Students are not permitted to attend, on a regular basis, classes in which they are not officially enrolled.

COURSE REPETITION

Courses in which a grade of "D" or "F" were received may be repeated. The units for which credit is granted will count only one time toward the degree or certificate. A course in which a grade of "C" or higher has been earned may be repeated only by special petition and due process. A course may be repeated only one time. Student transcripts shall be annotated in such a manner that all work attempted will remain legible and reflect the student's complete academic record.

ACADEMIC RENEWAL

A student may petition to have any units and credits taken during two consecutive semesters of attendance eliminated from the computation of the total grade point average, not to exceed a total of 30 units. Students submitting such petitions must have completed 24 units of college work with a GPA of 2.5 or better, subsequent to the semester(s) being petitioned. The semester(s) under consideration must have been completed at least two semesters prior to the time of submitting the petition. Students may not petition under these procedures more than one time. Student transcripts shall be annotated in such a manner that all work attempted will remain legible and reflect the student's complete academic record.

COLLEGE LIBRARY

The College Library is open during the following hours:

Monday through Thursday	7:55 a.m.-10:00p.m.
Friday	7:55 a.m.-4:30p.m.
Saturday	CLOSED
Sunday	CLOSED

The Library will be open during vacation periods on Monday through Friday from 7:55 a.m. to 4:30 p.m. Special hours, in effect on holidays, during examination periods, and during the summer, will be posted at the Library entrance.

Library cards are free to students, upon presentation of college identification. Limited library cards are also free to residents of the community. Inland Empire Academic Libraries Cooperative Library Cards are also available free of charge to Crafton Hills College students who may need resources of other academic libraries in the area.

LEARNING RESOURCE CENTER

The Learning Resource Center is open during the following hours:

Monday through Thursday	8:00a.m.-10:00p.m.
Friday	8:00a.m.-3:00p.m.
Saturday	CLOSED
Sunday	CLOSED

Varied services are provided in the Learning Center for students and faculty members. The Language Laboratory is housed there. Reading and skills materials from the English and Psychology Departments are held in the center. These classes are organized to aid students who are working toward college majors in general studies and occupational vocational degrees and certificates. Provision is made for students with special needs to meet with the director in order to set up short-term programs.

COLLEGE BOOKSTORE

At the beginning of each semester, for a one-month period, the College Bookstore is open according to the following schedule:

Monday through Friday	7:45 a.m.-3:00 p.m.
Monday through Thursday	6:00 p.m.-8:30 p.m.

Following the one-month period, the hours are adjusted to the following:
Monday through Friday 7:45 a.m.-3:00 p.m.

NO EVENING HOURS EXCEPT DURING FINAL EXAMINATIONS

STUDENT FINANCIAL AID AND EMPLOYMENT

Crafton Hills College provides financial aid to needy and deserving students. Funds are derived from many sources, including the National Direct Student Loan Program (NDSL), the Basic Educational Opportunity Grant (BEOG), the Extended Opportunity Program and Services (EOPS), and the College Work-Study Program (CWS).

A job placement service is operated by the College in conjunction with the Career Center for students seeking employment. In addition to maintaining a list of a wide variety of full- and part-time jobs available in the community. The placement service office also manages the College work-study program, funded federally under the Economic Opportunity Act of 1964 and the Extended Opportunity Program provided by California Senate Bill 164.

Information concerning loans, grants, and employment may be obtained from the office of the Assistant Dean, Student Personnel Services.

EXTENDED OPPORTUNITY PROGRAM AND SERVICES

In addition to financial assistance, EOPS provides supportive services such as counseling and tutoring to all students.

For further information. contact the office of the EOPS Coordinator.

HOUSING

Information regarding housing accommodations for the students may be obtained from the office of the Assistant Dean, Student Personnel Services. College assumes no responsibility for student residence.

STUDENT HEALTH SERVICES

Crafton Hills College maintains a student Health Services Center that provides first aid, health information, counseling, and referral services for students. It is located in the Gymnasium, Room G-106, and is staffed by college nurses from 8:00 a.m.-4:00 p.m., Monday-Friday, and 6:45-9:45 p.m., Monday-Thursday.

Crafton Hills College students are eligible for a Student Health Insurance plan in addition to the mandatory student accident insurance. For information, contact the Health Services Center.

STUDENT ACTIVITIES AND STUDENT GOVERNMENT

Student activities play a major part in the total campus community. Many of the student activities and development programs are services provided through the sale of Associated Student Body cards. All students are encouraged to purchase ASB cards to help support and expand the various student activities.

The Associated Student Body is recognized by the San Bernardino Community College Board of Trustees and the administration of Crafton Hills College as the official student organization in which membership is open to all students. The governing body of the Associated Students is the Student Central Council, whose officers are elected to serve one-year terms. This body supervises and controls all activities and budgets the student funds which are derived from the sale of ASB cards.

Student publications include the weekly "Student Bulletin," published by the Student Central Council to announce weekly events.

ATHLETICS

Although Crafton Hills College does not participate in intercollegiate athletics, provisions have been made for students to participate in the San Bernardino Valley College program according to the following guidelines:

1. The Crafton Hills College student will be eligible if he/she attends classes on both San Bernardino Valley College campus and Crafton Hills College.
2. The Crafton Hills College student will be eligible for athletics at San Bernardino Valley College if he/she attends all of his/her classes at Crafton Hills College.

This ruling by the League Conference will be in effect for the two colleges as long as Crafton Hills College does not participate in competitive athletic programs.

LIFETIME RECREATION SKILLS - Physical education skills taught at Crafton Hills College include those that can be used throughout adult life including skiing, golf, bowling, tennis, body building and conditioning.

EARNING TO LEARN - Each semester Crafton Hills College hires students for a variety of jobs on campus. Some employment is federally funded and designed to further students' understanding of their chosen career fields. Check with the CHC Placement Office.

AS A JUNIOR - Crafton Hills College offers courses needed to transfer to the college or university of your choice with your freshman and sophomore years completed. CHC transfer students are granted full junior standing at accredited institutions throughout the fifty United States and abroad.

SECTION II

ANNOUNCEMENT OF COURSES

ACCOUNTING	HORTICULTURE
ADMINISTRATION OF JUSTICE	INTERDISCIPLINARY STUDIES
AGRICULTURE	MARKETING
ALLIED HEALTH SCIENCES	MATHEMATICS
ANATOMY/PHYSIOLOGY	MICROBIOLOGY
ANTHROPOLOGY	MUSIC
ART	OCCUPATIONAL SAFETY AND HEALTH
ASTRONOMY	OCEANOGRAPHY
AUTO BODY TECHNOLOGY	OPTICIANRY
AUTOMOTIVE TECHNOLOGY	PHILOSOPHY
BIOLOGY	PHOTOGRAPHY
BUSINESS ADMINISTRATION	PHYSICAL EDUCATION
CHEMISTRY	PHYSICS
COMPUTER AND INFORMATION SCIENCES	POLITICAL SCIENCE
CONSUMER EDUCATION	PSYCHOLOGY
DRAFTING	REAL ESTATE
ECONOMICS	RELIGIOUS STUDIES
EMERGENCY MEDICAL CARE	RESPIRATORY THERAPY
ENGLISH	SECRETARIAL
FRENCH	SOCIOLOGY
GEOGRAPHY	SPANISH
GEOLOGY	SPEECH
GERMAN	SUPERVISION
HEALTH EDUCATION	THEATRE ARTS
HISTORY	WELDING TECHNOLOGY

FOR SPECIFIC COURSE OFFERINGS, PLEASE CHECK
THE CURRENT CLASS SCHEDULE

NUMBERING OF COURSES

Courses offered at Crafton Hills College make possible the selection of curricula that meet the requirements for most regular university majors as well as curricula that prepare the student for productive life in the community.

000-009 Basic skills courses applicable only to the Associate degree.

010-099 Multipurpose courser, not generally applicable to the baccalaureate degree, but may be transferable for specific majors.

100-299 Basic lower division courses applicable to the baccalaureate degree.

900-999 Noncredit courses not applicable to the Associate degree.

The San Bernardino Community College District has implemented a new course numbering system. Former course numbers appear in the parentheses immediately below the new number.

OPEN ENROLLMENT (CAC, TITLE 5, SECTION 51821)

It is the policy of the San Bernardino Community College District that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets established course prerequisites pursuant to code regulations.

ACCOUNTING

026 COST ACCOUNTING

4 UNITS

(102) PREREQUISITE: Acct. 220

LECTURE 4 hours per week.

Objectives and procedures of accounting for manufacturing enterprises. Job order and process costing, accounting for manufacturing overhead, joint-product and by-product costing, cost budgeting, standard costs and cost reports.

036 ADVANCED ACCOUNTING

4 UNITS

(101) PREREQUISITE: Acct. 220

LECTURE 4 hours per week.

Problems encountered in accounting for partnerships, joint ventures, consignments, installment sales, home office and branch operations, presentation of consolidated balance sheets, consolidated operating statements and statements of affairs and operation of estate and trusts.

098 ACCOUNTING WORK EXPERIENCE

4 UNITS

(98A-D) PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.

LECTURE 1 hour per week and

WORK EXPERIENCE 15 hours per week.

This course is designed to extend the student's vocational learning opportunities through employment in the Accounting profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

- 102 FINANCE ACCOUNTING AND ANALYSIS 3 UNITS**
(10) PREREQUISITE: None
 LECTURE 3 hours per week.
 A course for nonaccounting majors, with special emphasis on analysis of financial statements; utilization of financial reports, such as credit reports, Dun & Bradstreet reports, and stock market reports.
- 205 BOOKKEEPING 3 UNITS**
(35) PREREQUISITE: None.
 LECTURE 3 hours per week.
 The fundamentals of bookkeeping, such as recording of transactions in journals, posting to ledgers, preparation of the trial balance, and the use of controlling accounts and related schedules with practice in opening, adjusting, and closing various professional sets of books. Recommended for occupational students, and for those who wish preparatory training before entering Accounting 210.
- 210 PRINCIPLES OF ACCOUNTING 3 UNITS**
(1A) PREREQUISITE: None.
 COREQUISITE: Accounting 211
 LECTURE 3 hours per week.
 Development of the basic principles and practices applicable to the general accounting process. Application of these principles to the accounting cycle, statement preparation, and the problems of merchandise, depreciation, accounts receivable and payable accounting as well as accruals and deferrals.
- 211 PRINCIPLES OF ACCOUNTING LABORATORY 1 UNIT**
(1AL) PREREQUISITE: None.
 COREQUISITE: Accounting 210.
 LABORATORY 3 hours per week.
 Laboratory accompaniment to Accounting 210.
- 220 PRINCIPLES OF ACCOUNTING 3 UNITS**
(1B) PREREQUISITE: Accounting 210, 211.
 COREQUISITE: Accounting 221
 LECTURE 3 hours Der week.
 Development of the basic principles and practices applicable to the general accounting process. Application of these concepts in the fields of cost, income tax, stockholder's equity, funds statements and financial statement analysis.
- 221 PRINCIPLES OF ACCOUNTING LABORATORY 1 UNIT**
(1BL) PREREQUISITE: Accounting 210, 211
 COREQUISITE: Accounting 220.
 LABORATORY 3 hours per week.
 Laboratory accompaniment to Accounting 220.
- 225 INTERMEDIATE ACCOUNTING 3 UNITS**
(2) PREREQUISITE: Accounting 210, 220.
 LECTURE 3 hours per week.
 Adjustments, working papers, financial statements, cash and receivables, inventories, investments, plant assets, intangibles, liabilities, capital stock and retained earnings, statement analysis and application of funds.

- 230 STATE AND FEDERAL INDIVIDUAL INCOME TAX ACCOUNTING 3 UNITS**
 (45) **PREREQUISITE:** None; Accounting 205 and/or Accounting 210 recommended.
LECTURE 3 hours per week.
 An introduction to state and federal individual income tax returns, tax principles and procedures, application, special individual tax problems, tax planning, including implications of investments, tax shelters, tax preferences, small business endeavor, and retirement program.

ADMINISTRATION OF JUSTICE

- 051 VICE CONTROL 3 UNITS**
 (51) **PREREQUISITE:** None
LECTURE 3 hours per week.
 Code and case law relating to vice: detection, investigation and suspension; apprehension and prosecution of violators: particular emphasis on laws dealing with gambling, prostitution, narcotics and sex offenders.
- 060 FINGERPRINTS 3 UNITS**
 (60) **PREREQUISITE:** None.
LECTURE 3 hours per week.
 Science of fingerprints in the field of law enforcement including techniques and procedures involved in classification, latent impressions and court presentation.
- 098 ADMINISTRATION OF JUSTICE WORK EXPERIENCE 4 UNITS**
PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
LECTURE 1 hour per week and
WORK EXPERIENCE 15 hours per week.
 This course is designed to extend the student's vocational learning opportunities through employment in the allied health profession, for which the student's college program has been designed. The student must be enrolled in a planned program.
- 101 INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 UNITS**
 (1) **PREREQUISITE:** None.
LECTURE 3 hours per week.
 The history and philosophy of administration of justice in the United States; recapitulation of the system; identifying the various subsystems, role expectations, and their inter-relationships; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system.
- 102 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM 3 UNITS**
 (2) **PREREQUISITE:** None.
LECTURE 3 hours per week.
 An in-depth study of the role and responsibilities of each segment within the administration of justice system—law enforcement, judicial, corrections. A past, present and future exposure to each subsystem procedure from initial entry to final disposition and the relationship each segment maintains with its system members.

- 103 CONCEPTS OF CRIMINAL LAW 3 UNITS**
(3) PREREQUISITE: None.
LECTURE 3 hours per week.
Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force.
- 104 LEGAL ASPECTS OF EVIDENCE 3 UNITS**
(4) PREREQUISITE: None.
LECTURE 3 hours per week.
Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.
- 105 COMMUNITY RELATIONS 3 UNITS**
(5) PREREQUISITE: None.
LECTURE 3 hours per week.
An in-depth exploration of the roles of the administration of justice practitioners and their agencies. Through interaction and study, the student will become aware of the interrelationships and role expectations among the various agencies and the public. Principal emphasis will be placed upon the professional image of the system of justice administration and the development of positive relationships between members of the system and the public.
- 106 PRINCIPLES OF INVESTIGATION 3 UNITS**
(6) PREREQUISITE: None.
LECTURE 3 hours per week.
The study of basic principles of various types of investigations utilized in the justice system. Coverage will include problems in dealing with the public, specific knowledge necessary for handling crime scenes, interviews, evidence, surveillance, technical resources, and case preparation.
- 107 CONCEPTS OF ENFORCEMENT SERVICES 3 UNITS**
(7) PREREQUISITE: None.
LECTURE 3 hours per week.
Exploration of theories, philosophies, and concepts related to the role expectations of the law enforcement officer. Emphasis is placed upon the patrol, traffic and public service responsibilities and their relationship to the administration of justice system.
- 108 JUVENILE PROCEDURES 3 UNITS**
(8) PREREQUISITE: None.
LECTURE 3 hours per week.
Organization, functions and jurisdiction of juvenile agencies, processing and detention of juveniles, juvenile case disposition, juvenile status and court procedures.

109 POLICE RECORDS AND REPORT WRITING 3 UNITS

(9) PREREQUISITE: None.

LECTURE 3 hours per week.

This class has been developed to assist the officer obtain the best possible results in the area of report writing. Basic English grammar and functional sentence structure are correlated with the applied needs of law enforcement and the court systems suggested for simplicity and brevity. The necessity in criminal investigation and reporting for neatness, factual detail, and clarity are stressed.

110 PHYSICAL EVIDENCE AND CRIME SCENE INVESTIGATION 3 UNITS

PREREQUISITE: None.

LECTURE 3 hours per week.

Practical application of established techniques of physical evidence handling; development of experience in recognition of evidence types with respect to crime scene investigations; development of an appreciation for physical evidence in the realm of the criminal justice system.

AGRICULTURE

050-051 HORTICULTURE WORKSHOP 1 UNIT

052-053 PREREQUISITE: None. Courses must be taken in sequence.

LABORATORY 3 hours per week per unit.

General horticulture skills. Techniques of maintenance, transplanting, canning, potting and vegetative production found in the average home or nursery.

054 INDOOR PLANTS AND GARDENS 2 UNITS

PREREQUISITE: None.

LECTURE 1 hour per week and

LABORATORY 2 hours per week.

Course includes indoor culturing techniques for healthy container-grown house plants; methods of identification and design for containers; practical application of propagation for house plants by seed, cutting, layering, bulb division and grafting.

062-063 NURSERY SALES 2 UNITS

PREREQUISITE: One course in plant identification: AGRI 104, 106, 107 or 108. Courses must be taken in sequence.

LECTURE 1 hour per week and

LABORATORY 3 hours per week.

Actual plant sales in the college nursery. Special emphasis placed on giving correct information to inquiries.

071 FLORAL DESIGN TECHNIQUES MANAGEMENT 2 UNITS

PREREQUISITE: AGRI 118 or academic equivalent (see instructor).

LECTURE 1 hour per week and

LABORATORY 3 hours per week.

Advanced floral designing-display plantings. Floral shop management.

- 098 AGRICULTURE WORK EXPERIENCE 2-4 UNITS**
 PREREQUISITE: Concurrent enrollment in at least 7 units including Work Experience Education.
 LECTURE 1 hour per week and
 WORK EXPERIENCE 10-20 hours per week.
 The course is designed to extend the student's vocational learning opportunities through employment in the Agriculture profession for which the student's college program has been designed. The student must be enrolled in a planned program.
- 101 INTRODUCTION TO ANIMAL SCIENCE 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Types and breeds of agricultural animals and poultry. Production, methods, marketing and economics in animal science will be covered, together with foods and products of farm animals and their use by humans.
- 103 INTRODUCTION TO AGRONOMY 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Crops important to California, including principles of production and factors influencing crop distribution and classification.
- 105 PLANT IDENTIFICATION: SHRUBS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.
 Identification, landscape uses, ecology and culture of shrubs, vines and ground covers commonly grown in California.
- 106 PLANT IDENTIFICATION: TREES 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.
 Identification, landscape uses, ecology and culture of trees commonly grown in California.
- 107 PLANT IDENTIFICATION: HERBACEOUS PLANTS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.
 Identification, landscape uses, ecology and culture of annuals, herbaceous perennials, houseplants and bulbs commonly grown in California.
- 108 PLANT IDENTIFICATION: INDOOR PLANTS 2 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week.
 The identification, use and culture of indoor plants with special emphasis on light, water, and fertilizer requirements.
- 110 APPLIED VOCATIONAL BOTANY 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.

Elementary plant anatomy and taxonomy, stressing ornamental plants, shrubs, trees and bedding plants. A plant collection is required.

- 112 LANDSCAPE MAINTENANCE 3 UNITS**
PREREQUISITE: None.
LECTURE 2 hours per week and
LABORATORY 3 hours per week.
General care and maintenance of establishing plants and installation of new planting. Watering, pruning, fertilizing and pest control.
- 114 NURSERY PRACTICES 3 UNITS**
PREREQUISITE: None.
LECTURE 2 hours per week and
LABORATORY 3 hours per week.
Practices in plant production, including seedage and vegetative propagation, trees, shrubs, ground covers and bedding plants. Transplanting, canning, potting, soil mixes and fertilizers.
- 116 SUBURBAN PLANNING 3 UNITS**
PREREQUISITE: Agriculture 105-106.
LECTURE 2 hours per week and
LABORATORY 3 hours per week.
Landscaping of the suburban home, with emphasis on plot plants, design, layout and cost estimating. The uses of trees, shrubs, lawns, ground covers, fencing and walks.
- 118 FLORAL DESIGN TECHNIQUES 2 UNITS**
PREREQUISITE: None.
LECTURE 1 hour per week and
LABORATORY 3 hours per week.
Principles of professional floral design and floral shop procedures.
- 122•123 VEGETABLE GARDENING 2 UNITS**
124•125 PREREQUISITE: None. Courses must be taken in sequence.
LECTURE 1 hour per week and
LABORATORY 3 hours per week.
The culture of vegetable crops for home use. Soil control, harvesting and preserving methods.
- 129 SOILS AND FERTILIZERS 3 UNITS**
PREREQUISITE: None.
LECTURE 2 hours per week and
LABORATORY 3 hours per week.
General properties of soils, soil management, conservation, and fertility. The maintenance of soils under crop conditions, values, and use of fertilizers.
- 131 PLANT PEST CONTROL 3 UNITS**
PREREQUISITE: None.
LECTURE 2 hours per week and
LABORATORY 3 hours per week.
Identification and recognition of common diseases, weeds, insect pests, control methods, spray materials and application of pesticides.

- 133 TURF MANAGEMENT 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.
 Practices in management and maintenance of turf areas, including installation, scalping, mowing, watering, fertilizing and disease control. Various kinds of equipment in use in turf maintenance.
- 135 IRRIGATION AND SPRINKLERS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 3 hours per week.
 Principles of irrigation, methods of application, types of materials and automatic systems, including valves, sprinklers and their installation.
- 139 AGRICULTURAL INSPECTION REGULATIONS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Laws affecting production, processing and marketing of California crops. Functions of State and County agriculture departments.
- 141 AGRICULTURAL GRADES AND STANDARDS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Standardization provisions of the Agricultural Codes in relation to fruits, vegetables and nuts. Minimums for marketing maturity, size and legal tolerances.

ALLIED HEALTH SCIENCES

- 049 INTRODUCTION TO ALLIED HEALTH SCIENCE OCCUPATIONS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week and
 LABORATORY 6 hours per semester.
 This course is designed to introduce the student to the field of allied health sciences for purposes of exploring career alternatives, personal career expectations, employment opportunities and community agencies. Also, personalized counseling on a program leading to certificates, licenses, degrees will be provided.
- 090 SELECTED TOPICS IN ALLIED HEALTH SCIENCES ½-3 UNITS**
 PREREQUISITES: None.
 LECTURE ½-3 hours per week and/or
 LABORATORY 1½-9 hours per week.
 Designed to provide current information on selected topics in allied health sciences. Topics selected from the field of allied health sciences will include legal provisions for licensure, supervision of personnel and topics in microbiology, chemistry and laboratory management as applied to the allied health sciences.

- 098 ALLIED HEALTH WORK EXPERIENCE 4 UNITS**
PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
LECTURE 1 hour per week and
WORK EXPERIENCE 15 hours per week.
 This course is designed to extend the student's vocational learning opportunities through employment in the allied health profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

ANATOMY/PHYSIOLOGY

- 060 GENERAL ANATOMY AND PHYSIOLOGY 4 UNITS**
PREREQUISITE: None.
LECTURE 3 hours per week and
LABORATORY 2 hours per week plus 1 hour arranged.
 This course includes instruction in the basic concepts of the structures and functions of the human body. These basic concepts cover the general topics of the skeletal, circulatory, respiratory, excretory, muscular, digestive, nervous endocrine, and reproductive systems. This course will meet the anatomy and physiology requirement for those seeking a certificate or degree in the emergency medical care field.
- 150 HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS**
 (1A) **PREREQUISITE:** High school chemistry recommended.
LECTURE 3 hours per week and
LABORATORY 3 hours per week.
 A study of the structure and function of the human organism. Emphasis is on the skeletal, circulatory, respiratory, and excretory systems.
- 151 HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS**
 (1B) **PREREQUISITE:** Anatomy 150.
LECTURE 3 hours per week and
LABORATORY 3 hours per week.
 Emphasis is on the muscular, digestive, nervous, endocrine, and reproductive systems.

ANTHROPOLOGY

- 100 INTRODUCTION TO ARCHEOLOGY 3 UNITS**
 (3) **PREREQUISITE:** None.
LECTURE 3 hours per week.
 Prehistory and culture growth. Objectives and methods of modern archeology; important archeological discoveries throughout the world; contributions of archeology toward understanding the development of human culture from man's emergence as a culture-bearing animal to the beginning of written history.

102 CULTURAL ANTHROPOLOGY**3 UNITS**

(2) PREREQUISITE: None.

LECTURE 3 hours per week.

The nature of culture. A survey of the range of cultural phenomena, linguistics, and other related topics.

106 PHYSICAL ANTHROPOLOGY**3 UNITS**

(1) PREREQUISITE: None.

LECTURE 3 hours per week.

Human biology and evolution: the relation of man and the other primates: the origin and antiquity of man: fossil man: geochronological dating: anthropometry; race classification and racial problems.

223•224 SPECIAL PROBLEMS IN ANTHROPOLOGY**1 UNIT**

225•226 PREREQUISITE: Completion of or concurrent enrollment in another Anthropology class.

(22A-C)

LABORATORY 3 hours per week.

A course in practical archeology for superior students who want to further their knowledge of anthropology. The course will include archeological digging or museum work as these activities are available.

ART**100•102 ART HISTORY****3 UNITS**

(1A-B) PREREQUISITE: None.

LECTURE 3 hours per week and field trips.

Survey of outstanding periods in the history of Western Art—tracing the relationship between the arts and the society which produced it. Open to non-art majors and required of all art majors. Lectures illustrated by slides and motion pictures. Art field trips and reviews of exhibitions in the San Bernardino Valley College Little Gallery and elsewhere.

105 HISTORY OF 20TH CENTURY ART**3 UNITS**

(5) PREREQUISITE: None; Art 100-102 desirable.

LECTURE 3 hours per week.

A critical survey of 20th Century Art touching on its historical roots and examining the art of our time as a manifestation of our social and environmental milieu.

108 SURVEY OF MEXICAN ART**3 UNITS**

(16) PREREQUISITE: None.

LECTURE 3 hours per week.

Survey of the painting, architecture and sculpture of Mexico from pre-Columbian times to the present.

- 115 BASIC DESIGN - BEGINNING 3 UNITS**
 (2A) PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 4 hours per week.
 An exploration of both the spontaneous and the developmental creative process. The discovery and development of resources necessary to visual communication. Access to tools and experiences necessary for visual literacy.
- 116 BASIC DESIGN - ADVANCED 3 UNITS**
 (2B) PREREQUISITE: Art 115.
 LECTURE 2 hours per week and
 LABORATORY 4 hours per week.
 A further exploration of the creative process involving access to a wide variety of resources, tools and materials employed in visual communication.
- 117 DRAWING —BEGINNING 3 UNITS**
 (3A) PREREQUISITE: None.
 LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 The analysis and representation of form and space. A variety of media will be employed such as charcoal, ink, and pencil. Perspective projects are included.
- 118 DRAWING —ADVANCED 3 UNITS**
 (3B) PREREQUISITE: Art 117.
 LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 Further investigation and interpretation of form and space. Various media will include charcoal, tempera, chalk, ink, and pencil. A continuation of the theory and application of perspective.
- 130 LETTERING 4 UNITS**
 (19A) PREREQUISITE: None. Recommend concurrent enrollment in Art 115.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 An introduction course to commercial art with an emphasis on hand lettering that will include: historical relationships, tool and material familiarization, skill development, studio procedures, and presentation techniques.
- 131 ADVANCED LETTERING 4 UNITS**
 (19B) PREREQUISITE: Art 130.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 An advanced course in commercial art with an emphasis on machine lettering that will include equipment familiarization, appropriate technique manipulations, format experimentation, and an emphasis on portfolio presentation.

- 156•157 ELEMENTARY PAINTING 3 UNITS**
158•159 PREREQUISITE: Courses must be taken in sequence.
 (14A-D) LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 Beginning painting in watercolor and oils. Still life, landscape and figure painting .
- 166•167 LIFE DRAWING 3 UNITS**
168•169 PREREQUISITE: Courses must be taken in sequence.
 (25A-D) LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 A study of anatomy in relation to figure drawing. Graphic interpretations of the human figure in black and white and color. Contour, gesture, and volume drawings with basic study and functional qualities of human figure. Portrait painting and commercial illustration are introduced in second semester.
- 175 SCULPTURE 3 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 4 hours per week.
 An exploration in form and space using stone, wood, clay and plaster. Skills will be developed in using the tools required for carving and life modeling methods typically employed in these media. May be repeated to a maximum of 12 units.
- 198•199 METAL SCULPTURE 4 UNITS**
 (40A-B) PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 4 hours per week.
 A course in metal sculpture integrating the aesthetic and technical aspects of the process. Skills in drawing three-dimensional design are combined with the application of the basic fundamentals and safety precautions of welding technology to enable the student to create three-dimensional works of art.
- 210 BEGINNING CERAMICS 3 UNITS**
 (11A) PREREQUISITE: None.
 LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 Introduction to the art of pottery, with emphasis on use of the potter's wheel and various methods of decoration and glazing.
- 222 SPECIAL PROJECTS IN ART 1-4 UNITS**
 PREREQUISITE: Completion of or concurrent enrollment in an art course.
 LABORATORY 3 hours per week per unit.
 Independent study for selected students in any area of art. Projects to be determined jointly by student and instructor. (May be repeated for a maximum of 12 units.)

- 280 EXPERIMENTAL IMAGERY IN ART 4 UNITS**
(29) PREREQUISITE: Art 115 & 116.
LECTURE 2 hours per week and
LABORATORY 5 hours per week.
A course designed to focus and refine the skills necessary for visual awareness and to serve as a stimulating creative outlet for new experimental technical processes.

ASTRONOMY

- 050•051 ASTROPHOTOGRAPHY 1 UNIT**
052•053 PREREQUISITE: None. (Courses must be taken in sequence.)
(50A-D) LABORATORY 3 hours per week.
Operation and use of the telescope in photographing the moon, planets, the sun, nebulae, star groups, etc.

- 060•061 FIELD STUDY OF OBSERVATORIES 1 UNIT**
062•063 PREREQUISITE: A previous Astronomy course.
(51A-D) LECTURE 10 hours per semester and
FIELD STUDY 30 hours per semester.
A field study of professional observatories. Lecture and library research on current professional instruments and techniques will precede a one-week field trip to several major astronomical observatories. Field trip destinations will vary, but will include facilities such as Kitt Peak National Observatory, Lick Observatory, McDonald Observatory and Palomar Observatory.

- 150 INTRODUCTORY ASTRONOMY 3 UNITS**
PREREQUISITE: None.
LECTURE 3 hours per week.
A descriptive approach to the broad principles underlying the behavior of cosmic forces, man's place in the universe, the historical role of astronomy, and the processes which shape the universe.

- 160 ASTRONOMY LABORATORY 1 UNIT**
(2) PREREQUISITE: Astronomy 150. (Concurrent)
LABORATORY 3 hours per week.
A laboratory course in which the simpler physical aspects of astronomy are developed. Identification of constellations and stars, discussion of astronomical methods of observation and additional work with the telescope and accessories.

- 175 SELECTED TOPICS IN ASTRONOMY 1-3 UNITS**
PREREQUISITE: To be determined by course topic.
LECTURE 1-3 hours per week and
LABORATORY 3-9 hours per week.
Designed to provide current information on selected topics in the field of astronomy. (May be repeated for a maximum of 12 units.)

225 SPECIAL PROBLEMS IN ASTRONOMY**1-2 UNITS**

PREREQUISITE: Astronomy 160.

LABORATORY 3-6 hours per week.

A laboratory course designed for students interested in special projects beyond the standard laboratory course. (May be repeated for a maximum of 6 units.)

AUTO BODY TECHNOLOGY**010 AUTO BODY REPAIR AND REFINISHING (BEG.) 1-10 UNITS**

PREREQUISITE: Autote 030, Weldte 013

LECTURE 4 hours per week and

LABORATORY 18 hours per week.

Total Course Hours: Lecture 68, Laboratory 306

Fundamental operations of metal straightening, use of various solvents, thinners, reducers, lacquers, enamels (acrylic and alkyd), primers, primer sealers, primer surfaces and sandpapers. Skills developed in basic welding, solder filling, application of plastic filler, body unit replacement, preparation of auto for painting and painting experience.

018 AUTO BODY REPAIR AND REFINISHING (ADV.) 1-10 UNITS

PREREQUISITE: Autobo 010.

LECTURE 1-4 hours per week and

LABORATORY 3-18 hours per week.

Fundamental operations of metal straightening, use of various solvents, thinners, reducers, lacquers, enamels (acrylic and alkyd), primers, primer sealers, primer surfacers and sandpapers. Skills developed in basic welding, solder filling, application of plastic filler, body unit replacement, preparing of auto for painting and painting experience. This course is a continuation of Autobo 010.

020 AUTO BODY COLLISION APPRAISAL 3 UNITS

PREREQUISITE: None.

LECTURE 3 hours per week.

An introduction to the field of automotive collision appraisal. This course is designed to acquaint the student with auto body terminology, sheet metal, frame, glass and paint damage. Designed to prepare students for jobs in auto body repair shops, insurance companies, car buyers and traders. Students will write estimates on actual damaged vehicles.

**098 AUTO BODY TECHNOLOGY 4 UNITS
(98A-D) WORK EXPERIENCE**

PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.

LECTURE 1 hour per week and

WORK EXPERIENCE 15 hours per week.

This course is designed to extend the student's vocational learning opportunities through employment in the Auto Body profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

AUTOMOTIVE TECHNOLOGY

**010-011 AUTOMOTIVE MECHANIC,
(51A-B) ACCESSORY REBUILDING 1-6UNITS**

PREREQUISITE: None.

LECTURE 1-3 hours per week and

LABORATORY 3-9 hours per week.

A course designed to acquire the skills necessary to overhaul, tear down and refurbish carburetors, distributors, generators and regulators, alternators and regulators, starter motors and certain other automotive equipment. The student will become adept in the tear-down, repair and overhaul of the accessory equipment to the level that they may work out of their own shop or for an individual shop owner.

**013-014 AUTOMOTIVE MACHINIST,
(52A-B) ENGINE REBUILDING 1-6 UNITS**

PREREQUISITE: None.

LECTURE 1-3 hours per week and

LABORATORY 3-9 hours per week.

Introduction to the field of automotive machine shop technology, special tools and machinery, to train the student in the operation, set-up and inspection of the finished article with the latest gauges, calipers and micrometers. Course includes lectures in theory and practical use of the automotive machine shop machinery with the emphasis on the "hands-on" experience. The learning experiences include training on the engine block rebore machine, valve reseating, engine head rebuilding, cam servicing, connecting rod reservicing and related equipment rebuilding.

**018-019 AUTO BRAKE REPAIR AND
(53A-B) FRONT END ALIGNMENT 1-5UNITS**

PREREQUISITE: None.

LECTURE 1-3 hours per week and

LABORATORY 3-6 hours per week.

Maintenance and repair of American and foreign automobile brakes systems. Front end alignment and repair, servicing and repair of manual and power steering systems, static and dynamic wheel balancing and study of wheels, tires and shock absorbers and their effect on front end geometry. This course includes in-depth instruction and practical shop experience on all equipment used in brakes, alignment and wheel balancing.

**030 AUTOMOTIVE MECHANICS 1-6 UNITS
(60A) PREREQUISITE: None.**

LECTURE 1-3 hours per week and

LABORATORY 3-9 hours per week.

Introduction to the field of automotive and diesel technology for students who have no previous training in the subject. This course is exploratory in nature and may be used as a prerequisite to advanced courses in specialized study, such as rotary, reciprocating, diesel and turbine engines.

- 031 AUTOMOTIVE MECHANICS 1-6 UNITS**
 (60B) PREREQUISITE: Auto. Tech. 030.
 LECTURE 1-3 hours per week and
 LABORATORY 3-9 hours per week.
 An ongoing course designed for the student who has completed Automotive Mechanics 030 or who has prior experience in automotive mechanics. Advanced problems in automotive mechanisms and systems, emphasis on mechanical concepts and related physical principles, maintenance procedures and consumer data.
- 042-043 ENGINE TUNE-UP AND TROUBLE DIAGNOSIS 1-6 UNITS**
 (70A-B) PREREQUISITE: Auto. Tech. 030.
 (170A-D) LECTURE 1-3 hours per week.
 LABORATORY 3-9 hours per week.
 Engine operation, tune-up, and trouble diagnosis of gasoline engines. The use of test and calibration equipment and problems of engine system(s) failure. Use of electronic analyzers, scopes with in-depth study of analyzer patterns for peak performance tuning.
- 057 AUTOMOTIVE TRANSMISSIONS 1-6 UNITS**
 (54-54L) PREREQUISITE: None.
 LECTURE 1-3 hours per week and
 LABORATORY 3-9 hours per week.
 Introduction to hydraulic, air, electrical and torque conversion as applied to automotive, heavy duty equipment, marine propulsion, light pleasure cars, trucks and tractor transmissions. A comprehensive procedure for removing, disassembling, repairing and reassembling complete transmissions, both standard and automatic.
- 059 ADVANCED AUTOMOTIVE TRANSMISSIONS 1-6 UNITS**
 (55-55L) PREREQUISITE: Auto. Tech. 057.
 LECTURE 1-3 hours per week and
 LABORATORY 3-9 hours per week.
 Introduction to pressure control systems, pumps, valves and automatic shifting. Additionally, the various types of hydrodynamic units, fluid coupling, fluid converters, planetary gear assembly. The five laws of planetary gear operation are completely discussed, as well as overdrive, free wheeling, gear reduction and reaction members. Hands-on time of disassembly/assembly of power train components, clutches, overdrives, standard transmissions and overdrive servicing, torque converters, GMC transmissions, Chrysler transmissions, Ford transmissions, Turbo-hydramatic for front drive, Toyo Glide, Volkswagen stick-shift, auto transmissions, drive lines, rear axles and differentials.
- 062 SMALL ENGINE REPAIR AND OVERHAUL 1-4 UNITS**
 (162) PREREQUISITE: None.
 LECTURE 1-2 hours per week and
 LABORATORY 3-6 hours per week.
 Lecture-lab, theory of operations and maintenance of motor-cycles, engine tune-up, electrical and transmission systems.

076 AUTOMOTIVE MECHANICS FOR BEGINNERS 1-2 UNITS
(176) **PREREQUISITE:** None.
LECTURE 1 hour per week and
LABORATORY 2 hours per week.
An introduction course for women and men in the principles of the operation of the modern automobile. Practical experience in maintenance and repair at the owner-operator level.

098 AUTOMOTIVE TECHNOLOGY 4 UNITS
(98A-D) **WORK EXPERIENCE**
PREREQUISITE: Concurrent enrollment in at least 7 units including Work Experience Education.
LECTURE 1 hour per week and
WORK EXPERIENCE 15 hours per week.
The course is designed to extend the student's vocational learning opportunities through employment in the Automotive Technology profession for which the student's college program has been designed. The student must be enrolled in a planned program.

BIOLOGY

050 MEDICAL TERMINOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE 3 hours per week.
This course is designed for the student whose interests are directed or related to the medical sciences. Such words or terminology taught in this course are used to describe the human body, its functions, its normal state, its abnormal state, the diseases and injuries that affect it, and the various means, agents and procedures employed to prevent, minimize or cure the effects of disease or injury. The medical vocabulary is an extensive one. This course offers to the student mastery of fundamental terminology and includes correct pronunciation and usage of the medical vocabulary.

120 INTRODUCTION TO BIOLOGY 4 UNITS
PREREQUISITE: None.
LECTURE 3 hours per week and
LABORATORY 3 hours per week.
A study of the biological principles involved in cellular biology, human physiology, animal and plant diversity, genetics, evolution and ecology. Field trips to the local foothills and other areas of biological interest. This one semester general education course is designed for students not majoring in biology.

122 MARINE BIOLOGY 4 UNITS
(4) **PREREQUISITE:** None.
LECTURE 3 hours per week and
LABORATORY 3 hours per week.
A survey of the major areas of marine biology including plant and animal groups, coastal and deep water ecology, food webs, aquaculture, marine pollution and conservation.

- 123 ECOLOGY AND ENVIRONMENT 3 UNITS**
 (5) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A survey of the basic concepts of ecology including energy flow in ecosystems, predation, symbiosis, population biology, local biological communities and the human population explosion. Environmental topics include air and water pollution, nuclear reactors, pesticides and solid waste. Legal, political and economic solutions to problems are also considered.
- 124•125 FIELD BIOLOGY OF THE SOUTHERN 1 UNIT**
126 CALIFORNIA FOOTHILLS
 (6A-C) PREREQUISITE: Completion of or concurrent enrollment in a course in college science.
 LABORATORY OR FIELD WORK 3 hours per week.
 A study of the plants, animals, and ecological relationships in the Southern California foothills. Students will carry out field studies and conduct educational tours in the Crafton Hills College Wildlife Sanctuary.
- 127•128 SUBTIDAL MARINE BIOLOGY FOR 1 UNIT**
129 SCUBA DIVERS
 (8A-C) PREREQUISITE: SCUBA certification and a college science course.
 LABORATORY AND FIELD WORK 3 hours per week.
 A survey of the major groups of plants and animals in the water of the nearshore areas and offshore islands of California. Topics include collecting techniques, use of taxonomic keys, and ecological methods such as the quadrat and transect. Diving field trips to local areas will be included.
- 130 PRINCIPLES OF BIOLOGICAL SCIENCE— 5 UNITS**
ZOOLOGY
 PREREQUISITE: None.
 LECTURE 3 hours per week and
 LABORATORY 6 hours per week.
 Topics include scientific methods, the concepts of cell structure and function, gene action and protein synthesis, enzyme functions and genetics at the molecular level. This is followed by a survey of animal phyla and vertebrate organ system physiology. Field trips will be taken to marine intertidal areas and other locations of biological interest. This course is designed for pre-professional and biological science majors, but is open to all interested students. Majors should also take Principles of Biological Science-Botany.

131 PRINCIPLES OF BIOLOGICAL SCIENCE**5 UNITS****BOTANY**

PREREQUISITE: None.

LECTURE 3 hours per week and

LABORATORY 6 hours per week.

This course includes the concepts of energy exchange in organisms as illustrated by cellular respiration and photosynthesis in green plants. Mendelian and population genetics are followed by natural selection, evolution and ecology. Also included is a survey of the plant kingdom and a study of the physiology of land plants. Field trips will be taken to local chaparral, mountain and desert regions. This course is designed for pre-professional and biological science majors but is open to all interested students. Majors should also take Principle of Biological Science-Zoology.

150-151 INTRODUCTION TO FIELD BIOLOGY**1½ UNITS****152** PREREQUISITE: A college course in the biological sciences with a grade of "C" or better.

(16A-C)

LECTURE 1 hour per week and

LABORATORY/FIELD TRIPS 24 hours arranged.

Demonstration and practice of field techniques in biology including transects, quadrats, collecting methods, taking field notes and the use of plant and animal identification keys. Other topics include succession, ecosystems, and population dynamics. Field trips to areas of biological importance.

155 NUTRITION**3 UNITS**

PREREQUISITE: High school or college chemistry or biology recommended.

LECTURE 3 hours per week.

A study of chemical and biology concepts which provide a basis for the understanding of the principles and processes of nutrients within the human body. Topics include biochemistry of nutrients, applied nutrition, diet therapy, nutrition and disease, and research studies. Satisfies a lower division transfer requirement in nutrition.

201 BIOLOGY OF THE CELL**4 UNITS****(12)** PREREQUISITE: Chemistry 160.

LECTURE 3 hours per week and

LABORATORY 3 hours per week.

An introduction to the physical and biochemical aspects of the living cell including cytology, molecular structure, metabolism, bioenergetics, and cytogenetics. This course is particularly designed for pre-professional Life Science students.

214-215 BIOLOGY (LABORATORY PREPARATION)**1 UNIT****216-217** PREREQUISITE: Biology 120.**(20A-D)** LABORATORY 3 hours per week.

A course in practical laboratory techniques designed to acquaint the student with methods of collection and preparation of common biological materials as used in the biology laboratory.

- 225-226 BIOLOGY (SPECIAL PROBLEMS) 1-3 UNITS**
 227 PREREQUISITE: Biology 120. Courses must be taken in
 (22A-C) sequence.
 LABORATORY 3-9 hours per week.
 Designed for selected students who are interested in furthering
 their knowledge of biology on an independent study basis.
 Assigned problems will involve both library and laboratory work.

BUSINESS ADMINISTRATION

- 011 SECURITIES AND INVESTMENTS ANALYSIS 3 UNITS**
 (104) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A course for non-accounting majors with emphasis on the fundamentals of the stock market and investment practices. Special emphasis is placed on practical applications of investments of the individual small investor. Lectures and readings cover the subjects involved with stocks, bonds, options, mutual funds, and real estate.
- 052 APPLIED BUSINESS MATHEMATICS 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 A course covering a basic review of addition, subtraction, multiplication, division, fractions and percentages. Major emphasis is on practical business application of mathematics in the areas of accounting, marketing, finance, including payroll, insurance, taxes, stocks, bonds, annuities, and management analysis.
- 098 BUSINESS ADMINISTRATION WORK EXPERIENCE 4 UNITS**
 PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
 LECTURE 1 hour per week and
 WORK EXPERIENCE 15 hours per week.
 This course is designed to extend the student's vocational learning opportunities through employment in the business administration profession, for which the student's college program has been designed. The student must be enrolled in a planned program.
- 101 INTRODUCTION TO BUSINESS 3 UNITS**
 (20) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A general survey course of the business field. It provides the background of understanding of business that is important to everyone and serves as the basic beginning college course in business subjects. Recommended for all business majors.
- 105 SMALL BUSINESS MANAGEMENT 3 UNITS**
 (100) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A study of small business in the distribution of goods and services, from producer through middlemen to consumers.

- 115 OFFICE MANAGEMENT 3 UNITS**
 (44) **PREREQUISITE:** None.
LECTURE 3 hours per week.
 Office organization, management, and functions: methods used in selecting and training office personnel; office layout and work flow; selections and care of equipment and supplies: simplification of systems and procedures, including automation and data processing: form design and control; case studies.
- 150 ADVERTISING LAYOUT AND DESIGN I 3 UNITS**
PREREQUISITE: Marketing 110.
LECTURE 2 hours per week and
LABORATORY 4 hours per week.
 The beginning "hands-on" course for Business/Commercial Design students. It deals with the basics of advertising layout within the area of creating symbolic graphic images and layouts for public service product promotion and corporate identity.
- 152 ADVERTISING LAYOUT AND DESIGN II 3 UNITS**
PREREQUISITE: Business Admin. 150.
LECTURE 2 hours per week and
LABORATORY 4 hours per week.
 Will concentrate on advertising design problems with multi-colors and folds, brochures, booklets, annual reports, posters and point-of-purchase art. Typography and production will also be covered.
- 160 PRODUCT & PACKAGE ILLUSTRATION & DESIGN 3 UNITS**
PREREQUISITE: Business Admin. 150 & 152.
LECTURE 2 hours per week and
LABORATORY 4 hours per week.
 Product and package illustrations develop in the student the ability to handle pen and brush technique with ink, wash and paint to render products for newspaper and magazine advertisements. Package design will be concerned with problems in design on a three-dimensional surface and some legal points.
- 165 FASHION AND SOFT GOODS ILLUSTRATION 3 UNITS**
PREREQUISITE: Marketing 110 & Business Admin. 150 & 152.
LECTURE 2 hours per week and
LABORATORY 4 hours per week.
 Deals with techniques of illustration of the "Fashion Look" in clothing and accessories in men's, women's and juniors' apparel. Also other types of fashion soft goods are dealt with.
- 206 PRINCIPLES OF MANAGEMENT 3 UNITS**
 (25) **(Organizational Behavior)**
PREREQUISITE: Business Admin. 100 or Business Experience.
LECTURE 3 hours per week.
 Introductory course in the concepts and application of management and business. Analysis of the basic management functions or planning, organizing, staffing, directing and controlling with an emphasis on the interrelation of these functions in an organization. Also, the significance of the organization as a social system and the significance of current social and economic problems of a pluralistic society are stressed. Case studies.

- 217 BUSINESS LAW 3 UNITS**
 (35A) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Principles of law and use of cases as applied to business, and specifically to contracts, principal and agent, employment, negotiable instruments, principal and surety, insurance, bailments, sales partnerships, corporations, security devices, trusts and estates and governmental regulations.
- 218 BUSINESS LAW 3 UNITS**
 (35B) PREREQUISITE: Business Admin. 217.
 LECTURE 3 hours per week.
 To give students an applicable understanding of the practical and theoretical concepts of Civil Law. To give the business student a basic grasp of the future rights, duties and liabilities in his or her normal conduct of business transactions.
- 230-231 SPECIAL PROBLEMS IN BUSINESS LAW 1-3 UNITS**
 (22A-B) PREREQUISITE: Completion of or concurrent enrollment in a Business Course.
 LABORATORY 3 hours per week per unit.
 An independent study course of directed research, culminating in a mini-thesis upon a subject within the field of law, or within the combined fields of (1) Law and Politics; (2) Law and Sociology; (3) Law and Economics; (4) Law and Psychology; (5) Law and Social History; or (6) English Legal History. Designed primarily for transfer students.

CHEMISTRY

- 101 INTRODUCTORY CHEMISTRY 4 UNITS**
 (2A) PREREQUISITE: One year of high school algebra.
 LECTURE 3 hours per week and
 LABORATORY 3 hours per week.
 A descriptive course in chemistry with emphasis on discoveries, methods of refining, physical and chemical properties, and use of the more common elements and compounds.
- 102 INTRODUCTORY ORGANIC CHEMISTRY 4 UNITS**
 (2B) PREREQUISITE: Chemistry 101.
 LECTURE 3 hours per week and
 LABORATORY 3 hours per week.
 For students not majoring in chemistry and not planning to take additional courses in organic chemistry. A survey of the important classes of organic compounds, their reactivity, and their reaction mechanisms.
- 160 GENERAL CHEMISTRY 5 UNITS**
 (1A) PREREQUISITE: High school chemistry or Chemistry 101.
 LECTURE 3 hours per week and
 LABORATORY 6 hours per week.
 An introduction to college chemistry, emphasizing the general principles of chemistry and the analysis and solution of problems in chemistry.

161 GENERAL CHEMISTRY 5 UNITS

(1B) PREREQUISITE: Chemistry 160 with a grade of "C" or better.
LECTURE 3 hours per week and
LABORATORY 6 hours per week.
A continuation of Chemistry 160 with special emphasis on the theory and techniques of inorganic qualitative analysis.

214•215 ORGANIC CHEMISTRY 4 UNITS

(12A-B) PREREQUISITE: Chemistry 160-161 with a grade of "C" or better. Courses must be taken in sequence.
LECTURE 3 hours per week and
LABORATORY 3 hours per week.
Carbon compounds, the aliphatic, aromatic, and heterocyclic series. Includes modern theoretical concepts. Laboratory includes the preparation, identification, and study of the properties of organic compounds.

224•225 SPECIAL PROBLEMS IN CHEMISTRY 1-2 UNITS

(22A-B) PREREQUISITE: Chemistry 160.
LABORATORY 4 hours per week per unit.
A laboratory course designed for selected students in chemistry. Normally the problem is selected by the instructor. Students may not take this course more than two semesters.

COMPUTER AND INFORMATION SCIENCES

098 COMPUTER AND INFORMATION SCIENCES 4 UNITS
WORK EXPERIENCE

PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
LECTURE 1 hour per week and
WORK EXPERIENCE 15 hours per week.
This course is designed to extend the student's vocational learning opportunities through employment in the computer and information sciences profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

101 SURVEY OF DATA PROCESSING 3 UNITS

(3) PREREQUISITE: None.
LECTURE 3 hours per week.
Introduction to the methods, techniques and systems for manually, mechanically and electronically processing business data. History and development of data processing, punch card processing and programming computers for integrated and automatic processing of business data.

102 BASIC LANGUAGE 3 UNITS

(2) PREREQUISITE: Elementary Algebra.
LECTURE 3 hours per week and
LABORATORY 1 hour per week.
A fundamental course in computer programming and problem solving using the BASIC language. Students will write, run, and debug programs in an interactive computer system to solve both numerical and nonnumerical problems in various areas of applications.

- 104 FORTRAN IV (COMPUTER PROGRAMMING) 3 UNITS**
 (4) PREREQUISITE: 1 year of high school algebra.
 LECTURE 3 hours per week.
 A general course supporting any discipline utilizing computer-mathematical methods. Business applications emphasized. Strongly recommended for all business, accounting, marketing and economics majors.
- 202 PROGRAMMING BUSINESS 3 UNITS**
 (7A) APPLICATIONS (COBOL)
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Computer fundamentals, computer logic, flow charting, documentation techniques. Advanced techniques for large scale computing systems. Introduction to COBOL.
- 203 PROGRAMMING BUSINESS 3 UNITS**
 (7B) APPLICATIONS (COBOL)
 PREREQUISITE: C&IS.
 LECTURE 3 hours per week.
 Continuation of C&IS 202. COBOL is a high-level programming language utilized by most equipment manufacturers, development of specialized programming techniques.

CONSUMER EDUCATION

- 010 PERSONAL FINANCE 3 UNITS**
 (50) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Preparation for meeting everyday problems of personal finance, including problems of budgeting, borrowing, charge accounts, installment buying, insurance, savings, investments, pensions, social security, home ownership, banking functions, tax payments, trust funds, wills, and estates.
- 098 CONSUMER EDUCATION WORK EXPERIENCE 4 UNITS**
 PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
 LECTURE 1 hour per week and
 WORK EXPERIENCE 15 hours per week.
 This course is designed to extend the student's vocational learning opportunities through employment in the consumer education profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

DRAFTING

- 054 BLUEPRINT READING AND SKETCHING 2 UNITS**
 PREREQUISITE: None.
 LECTURE 1 hour per week and
 LABORATORY 2 hours per week.
 A study of blueprints and drawings used in industry, including orthographic projection and the making of simple sketches.

- 057 DRAFTING I 4 UNITS**
 PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 6 hours per week.
 Techniques of drafting, geometric construction, lettering, multi-view and single-view projections, section views, primary auxiliary views and dimension.
- 058 ARCHITECTURAL DRAFTING 4 UNITS**
 PREREQUISITE: None. Recommend concurrent enrollment in Art 115-116.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 Basic architectural illustration as applied to residential wood-frame construction, study of architectural symbols and materials; Uniform Building Code as it relates to working drawings; study and application of perspective drawings and renderings.

ECONOMICS

- 100 THE AMERICAN ECONOMY 3 UNITS**
 (10) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A survey of the American economy, with emphasis on the development, functioning, and significance of economic institutions. Special attention to economic growth, the national debt, inflation, and international economic problems.
- 112 ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS**
 (12) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Economic analysis of American history from exploration and colonization to the present. Emphasis on the growth and development of the American economy's major sectors: industry, commerce, transportation, finance, factor markets.
- 204 PRINCIPLES OF ECONOMICS 3 UNITS**
 (1A) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Introduction to economics, with special emphasis on national economic problems. Particular attention is focused on macro-economic theory and the role of fiscal and monetary policy.
- 205 PRINCIPLES OF ECONOMICS 3 UNITS**
 (1B) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Introduction to economics with special emphasis on micro-economic problems. Also includes international economics, economic development, and comparative economic systems.
- 225•226 SPECIAL PROBLEMS IN ECONOMICS 1-3 UNITS**
227 PREREQUISITE: Economics 204 or 205.
 (22) LABORATORY 3-9 hours per week.
 A course for selected students who are interested in furthering their knowledge of economics at the independent study level. Special problems will involve library research, laboratory projects and/or field studies. Results are presented as a term paper and oral interview.

EMERGENCY MEDICAL CARE

049 INTRODUCTION TO EMERGENCY MEDICAL CARE 1 UNIT

PREREQUISITE: Completion of EMC 060.

LECTURE 24 hours per semester.

This course is designed to introduce the student to the basic philosophy and concepts of paramedical training and the relationship between the paramedic in the field with those professionals involved in the Emergency Medical system; doctors, nurses and allied health professionals, the patient and family members and others residing in the community. The student will also be introduced to the legal concepts of Emergency Medical Care, as well as the verbal and nonverbal communication within the Emergency Medical Care delivery system.

050 CARDIOPULMONARY RESUSCITATION 1/2-1 UNIT

PREREQUISITE: None.

LECTURE 1/2-1 hour per week.

This course is designed for the teaching of Basic Life Support, Cardiopulmonary Resuscitation, training to groups with specific needs, such as policemen, firemen, lifeguards, rescue workers, high-risk industry workers, families of heart patients and others interested in rendering emergency cardiac care.

051 ADVANCED CARDIOPULMONARY RESUSCITATION 1-2 UNITS

PREREQUISITE: EMC 050.

(Must hold a current certificate in Basic Life Support from American Red Cross or American Heart Association)

LECTURE 1 hour per week and/or

LABORATORY 1 1/2 hours per week.

This course is designed to improve the emergency Advanced Life Support skills of professional medical and paramedical personnel.

053 WATER SAFETY AND LIFESAVING 3 UNITS

(4) PREREQUISITE: Advanced swimming ability.

LECTURE 2 hours per week and

LABORATORY 3 hours per week.

Senior lifesaving and water safety instruction. Upon successful completion of course, students will be awarded the Red Cross Water Safety Instructor Certificate for qualifying as a lifeguard and water safety instructor. This certification is required for most pool jobs.

054 ADVANCED FIRST AID AND EMERGENCY CARE 3 UNITS

(10) PREREQUISITE: None.

LECTURE 3 hours per week.

This course is designed for those in the service of their community, providing them with knowledge and skills to meet the needs of their positions. Incorporated with basic first aid training and life saving procedures, the Advanced First Aid and Emergency Care course prepares the student to work in the field of rescue.

055 VEHICLE RESCUE—A SYSTEM OF OPERATIONS 3 UNITS

PREREQUISITE: EMC 060, must be 18 years of age.

LECTURE 30 hours per course and

LABORATORY 18 hours per course.

Vehicle rescue constitutes a complete system of operations. Extrication is but one activity within this system, and disentanglement is but one aspect of that activity. This course treats the system of vehicle rescue in terms of its component parts, each of which builds on those that precede it and leads into those that follow. The course covers the system of vehicle rescue operations in ten steps: preparation, response, assessment, hazard control, support operations, gaining access, emergency care, disentanglement, removal-transfer and termination.

056 EMERGENCY MEDICAL ASSISTANT 2 UNITS

(64) PREREQUISITE: None.

LECTURE 2 hours per week.

This course is designed to meet State Department of Health Criteria for the promulgation of Section 217 of the Health and Safety Code which requires that all policemen, sheriffs, deputy sheriffs, members of the California Highway Patrol, ocean and public beach and public pool lifeguards, and firemen must be trained to administer first aid including cardiopulmonary resuscitation. The scope of the course as approved by the Health Department must prepare the person to recognize and render assistance for the following emergency situations: airway obstruction, respiratory arrest, cardiac arrest, severe bleeding, shock, orthopedic injuries including fractures, severe soft tissue injuries, head injuries, and life-threatening environmental circumstances.

057 STANDARD FIRST AID/MULTI MEDIA ½-1 UNIT

PREREQUISITE: None.

LECTURE 8-16 hours per semester.

Standard First Aid Course designed to teach the knowledge and skills that are needed for the emergency care of the injured until a physician arrives, and to create an active interest in the prevention of accidents through the elimination of their causes.

**060 EMERGENCY MEDICAL TECHNICIAN—1 6 UNITS
(AMBULANCE)**

PREREQUISITE: EMC 054; current certification American Red Cross, Advanced First Aid and Emergency Course, must be 18 years of age.

LECTURE 96 hours per course and

LABORATORY 24 hours per course.

This course exceeds the State Department of Health criteria for which an EMT-1A Refresher course must be completed for continuing certification. Graduates are certified as EMT-1A's for a period of two years after which an EMT-1A Refresher Course must be completed for continuing certification. Graduates also receive a basic CPR (cardiopulmonary resuscitation) card issued by the American Heart Association which must be renewed by CPR Refresher Course each 2 years. This course is extremely valuable for people who are involved in rescue work and those who work in hospital emergency departments. The course stresses hands-on emergency medical skills proficiency. Needed to enhance the EMS Delivery System in the field and on an operating mobile ambulance.

- 062 EMERGENCY MEDICAL TECHNICIAN 1/1A** **2 UNITS**
 (62) **(AMBULANCE) (REFRESHER COURSE)**
 PREREQUISITE: EMC 060.
 LECTURE 2 hours per week and
 LABORATORY 6 hours per semester.
 This course exceeds State Department of Health criteria for the retraining and recertification of ambulance drivers/attendants. Graduates are recertified as EMT-1A's for a period of two years. State regulations require recertification each two years after initial certification which must occur between the 18th and 24th month following certification. Course includes a review of life-support measures; cardiopulmonary resuscitation in accord with the standards of the American Heart Association; and the use of emergency medical equipment and supplies, plus new techniques and materials. Course is extremely valuable for people involved in rescue work and those needing refreshment of emergency medical skills proficiency such as those who work in hospital emergency departments. Needed to enhance the EMS Delivery System in the field and on an operating mobile ambulance.
- 070 CARDIOLOGY** **3 UNITS**
 PREREQUISITE: Prior or concurrent enrollment in Anatomy 060.
 LECTURE 2 hours per week and
 LABORATORY 1½ hours per week.
 This course is designed to introduce the student to the basic pre-hospital coronary care systems and to provide the background necessary to implement a pre-hospital coronary care system and to instruct the prospective paramedical technician in both theoretical and practical management of patients with acute myocardial infarction.
- 076 INTRODUCTION TO PHARMACOLOGY** **3 UNITS**
AND DRUG THERAPY
 PREREQUISITE: Prior or concurrent enrollment in EMC 070, BIOL 050.
 LECTURE 3 hours per week.
 This course is designed to enhance the student's knowledge in regard to the administration of medications, to develop an understanding of drug therapy and to develop a background of general information about drugs and their actions and interactions. The student will also develop an adequate understanding of basic drug mathematics and posology.
- 080 PRE-HOSPITAL CARE I** **4 UNITS**
 PREREQUISITE: BIOL 050, 060, EMC 049, 060, 070, 076.
 LECTURE 54 hours per semester and
 LABORATORY 54 hours per semester.
 This course is designed to enhance the student's knowledge in regard to the ability to diagnose and treat signs of traumatic emergencies and/or medical emergencies and the ability to respond to specific emergency situations arising from traumatic or medical emergencies. The course is designed to approach clinical problems in emergency medicine with emphasis on the pathophysiology of disease processes as the basis for efficient and rational initial emergency management.

082 PRE-HOSPITAL CARE II 4 UNITS

PREREQUISITE: EMC 080.

CLINIC 220 hours per semester.

This course is designed to further enhance the student's knowledge in regard to the administration of emergency medicine in a clinical setting. The student will assist and observe in emergency rooms under the direct supervision of staff members of the treating facility. The student will also observe and/or assist in other clinical areas of the treating facility, i.e., intensive care unit, cardiac care unit, burn unit, hemodialysis unit, operating room, etc.

084 PRE-HOSPITAL CARE III 6 UNITS

PREREQUISITE: EMC 082.

CLINIC 300 hours per semester.

The course is designed to coordinate the advanced paramedical training with a field mobile intensive care unit. The students will assist and observe emergency medical intervention in traumatic medical and surgical emergencies and diseases. This phase of the training program will be in conjunction with a registered paramedical unit.

090 SELECTED TOPICS IN EMERGENCY MEDICAL CARE ½-3 UNITS

PREREQUISITE: Mobile Intensive Care Nurse or Paramedic.

LECTURE ½-3 hours per week and/or

LABORATORY 1½-9 hours per week.

This course is designed to provide current information on selected topics for the continuing education of Mobile Intensive Care Nurses and/or Paramedics. Topics selected from the field of emergency medical care will include cardiology, medical trauma, pharmacology, basic paramedic sciences, pediatrics, obstetrics, medical, surgical, and psychiatric problems. Satisfies the partial requirement for recertification. This class may be repeated for credit to a maximum of 9 units.

093 ADVANCED CARDIAC LIFE SUPPORT—INSTRUCTOR 1-2 UNITS

PREREQUISITE: EMC 051—Advanced Basic Life Support, must be 18 years of age.

LECTURE 18-28 hours per course and

LABORATORY 6 hours per course.

This course is designed to provide qualified instructors to teach Advanced Life Support skills to the medical, nursing and paramedical community.

094 ADVANCED CARDIAC LIFE SUPPORT—FACULTY 1-2 UNITS

PREREQUISITE: EMC 093.

LECTURE 2 hours per week and

LABORATORY 6 hours per semester.

Designed to provide qualified faculty to teach Advanced Life Support Instructor courses to the medical, nursing and paramedical community.

- 098 EMERGENCY MEDICAL CARE WORK EXPERIENCE 4 UNITS**
PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
LECTURE 1 hour per week and
WORK EXPERIENCE 15 hours per week.
This course is designed to extend the student's vocational learning opportunities through employment in the emergency medical care profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

ENGLISH

- 001•002 VOCABULARY IMPROVEMENT 3 UNITS**
(104A-B) PREREQUISITE: None.
LECTURE 3 hours per week.
The growth and structure of the English language; development of skill in self-expression through vocabulary improvement.
- 011 READING SKILLS 1-3 UNITS**
PREREQUISITE: None.
LECTURE ½-3 hours per week and/or
LABORATORY 3-9 hours per week.
A student will be tested on the Nelson-Denny Reading Test and begin a series of reading skills at a level appropriate to the test results. A series of pre-arranged laboratory or lecture activities in the area of speed reading and college reading study skills will be provided. These activities are designed to develop greater reading flexibility, comprehension, retention, and vocabulary. Mode of instruction will be individualized and/or in small groups.
(May be taken for a maximum of 12 units. Psychology 025 and English 011 may not be repeated for more than a total of 12 units. Only 6 units of Psychology 025 may be counted toward an Associate Degree.)
- 015 REVIEW OF ENGLISH GRAMMAR AND USAGE 3 UNITS**
(55) PREREQUISITE: None.
LECTURE 3 hours per week.
A course in the grammar and usage of the English language. Designed to meet the needs of the Associate degree candidate. Emphasis is on the acquisition of a sense of fitness in the use of English.
- 051 INTRODUCTION TO LITERATURE 3 UNITS**
(64) PREREQUISITE: None.
LECTURE 3 hours per week.
The reading and discussion of fiction, poetry, and drama.
- 100 FRESHMAN COMPOSITION 3 UNITS**
(1A) PREREQUISITE: Pass placement test.
LECTURE 3 hours per week.
Training in effective written composition: theme assignments with regular criticism and instruction.

- 140•141 NEWSPAPER PRODUCTION 4 UNITS**
142•143 PREREQUISITE: None.
 (20A-D) LECTURE 2 hours per week and
 LABORATORY 4 hours per week.
 This course will give students an opportunity to receive actual working experience in journalism. The class will produce the campus newspaper. Students enrolling in this course will be exposed to the various facets of newspaper journalism: reporting, news writing, layout, copywriting, head writing, photography, and editing .
- 144 BUSINESS ENGLISH 3 UNITS**
PREREQUISITE: Placement Test.
 LECTURE 3 hours per week.
 Review of basic grammar, punctuation, capitalization, and spelling. Emphasis on grammar and vocabulary building for effective business communication.
- 152 FRESHMAN COMPOSITION AND LITERATURE 3 UNITS**
(1B) PREREQUISITE: English 100.
 LECTURE 3 hours per week.
 A study of the more important literary types to familiarize the student with the fundamental principles of literary criticism and interpretation; additional writing based on critical reading.
- 160 LITERATURE BY WOMEN 3 UNITS**
(15) PREREQUISITE: English 100.
 LECTURE 3 hours per week.
 This course will focus on contemporary literature by and about women, with emphasis on autobiographical works.
- 170 THE FILM EXPERIENCE 3 UNITS**
(39) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A consideration of film for the filmviewer rather than the filmmaker. Utilizing the methods of literary criticism, the course will examine the use of image, symbol, theme, character and plot in an effort to determine what makes a good film.
- 234•235 CREATIVE WRITING 3 UNITS**
(32A-B) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Offers an opportunity for students with interest and ability in writing to explore further their potentials in the art forms in the creative area. Students may concentrate on special interests. Emphasis is upon writing for improvement, and theory presented is also toward that purpose. Student may take either a one-year course sequence of two semesters or a single semester.
- 250•251 FICTION 3 UNITS**
(3) PREREQUISITE: English 100.
 LECTURE 3 hours per week.
 An intensive study of fiction as a distinct literary form. Outside reading and in-class discussions of representative short stories and novels accompanied by occasional short written analyses. Not a creative writing class. Generally, emphasis will be on a particular type of fiction (see schedule of classes for emphasis).

- 262•263 AMERICAN LITERATURE 3 UNITS**
 (30A-B) PREREQUISITE: English 100. Courses need not be taken in sequence.
 LECTURE 3 hours per week.
 Reading of representative literary works of significant writers to illustrate the origin and development of American thought and culture.
- 272•273 SURVEY OF ENGLISH LITERATURE 3 UNITS**
 (46A-B) PREREQUISITE: English 100-152.
 LECTURE 3 hours per week.
 Analysis of masterpieces of every literary type significant in the development of English literature from the beginning to the present day, supplemented by a study of the historical and social background of the literature and lives of representative and important writers: term paper based on reading and library investigation.
 NOTE: This course is a requirement for English majors.
- 276 SHAKESPEARE 3 UNITS**
 (28) PREREQUISITE: English 100.
 LECTURE 3 hours per week.
 A literature course focused primarily upon the dramatic works of William Shakespeare. While some lectures on Shakespeare's life and the nature of his era will be given by the instructor, the majority of class time will be spent in class discussion. Reading assignments will include Shakespearean plays and poems as well as biographical material.

FRENCH

- 150 SPOKEN FRENCH 21/2 UNITS**
 (8A) PREREQUISITE: None.
 LECTURE 2½ hours per week and
 LABORATORY ½ hour per week.
 Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
- 151 SPOKEN FRENCH 21/2 UNITS**
 PREREQUISITE: French 150.
 LECTURE 21/2 hours per week and
 LABORATORY 1/2 hour per week.
 A continuation of French 150. Comprehension, conversation, reading and composition, including drill in essential grammar at the elementary level.
 French 150-151 is equivalent to French 155.
- 155 ELEMENTARY FRENCH I 5 UNITS**
 (1) PREREQUISITE: None.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 Comprehension, conversation, reading and composition, including drill in essential grammar, at the elementary level.
- 160 SPOKEN FRENCH 2½ UNITS**
 (8C) PREREQUISITE: French 151, or French 155, or 2 years of high school French.

LECTURE 2½ hours per week and

LABORATORY ½ hour per week.

A continuation of French 151. Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.

161 SPOKEN FRENCH

21/2 UNITS

(8D) PREREQUISITE: French 160.

LECTURE 2½ hours per week and

LABORATORY ½ hour per week.

A continuation of French 160. Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.

French 160-161 is equivalent to French 165.

165 ELEMENTARY FRENCH II

5 UNITS

(2) PREREQUISITE: French 155, or French 150 and 151, or two years of high school French.

LECTURE 5 hours per week and

LABORATORY 1 hour per week.

A continuation of French 155.

175 INTERMEDIATE FRENCH I

4 UNITS

(3) PREREQUISITE: French 165, or French 160 and 161, or two years of high school French.

LECTURE 4 hours per week and

LABORATORY 1 hour per week.

Composition and conversation. including a review of grammar, plus extensive and intensive reading of practical as well as literary French.

185 INTERMEDIATE FRENCH II

4 UNITS

(4) PREREQUISITE: French 175 or four years of high school French.

LECTURE 4 hours per week and

LABORATORY 1 hour per week.

A continuation of French 175.

225 FRENCH GRAMMAR AND COMPOSITION

2 UNITS

(25A-B) PREREQUISITE: French 185.

LECTURE 2 hours per week.

An intensive review of the major concepts of French grammar with considerable practice in usage, composition, and idiomatic application of these principles.

242 FRENCH CULTURE AND CIVILIZATION

3 UNITS

(42A-B) PREREQUISITE: None.

LECTURE 3 hours per week.

Class reading and discussion of the salient points of the culture and civilization of France, along with adequate outside reading and research. The class is conducted in English.

GEOGRAPHY

102 MAN AND ENVIRONMENT

3 UNITS

(2) PREREQUISITE: None.

LECTURE 3 hours per week and field trips.

An introduction to cultural geography emphasizing the inter-relationship of man and the land, emphasizing populations, regional analysis and livelihood patterns.

- 104 ECONOMIC GEOGRAPHY 3 UNITS**
 (4) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 The principles governing the geography of economic activities as developed through studies of representative occupations, commodities and trade.
- 110 PHYSICAL GEOGRAPHY 3 UNITS**
 (1A) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 A study of the basic elements of geography (especially climate, landforms, hydrography, soils, native animals life, and national vegetation), their interrelationships and patterns of distribution on world basis.
- 111 PHYSICAL GEOGRAPHY LABORATORY 1 UNIT**
 (1AL) PREREQUISITE: Geography 110.
 LABORATORY 3 hours per week.
 A laboratory experience to accompany Geography 100.
- 114 WEATHER AND CLIMATE 3 UNITS**
 (25) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 A study of the earth's atmospheric phenomena, with special reference to the causes and regional distribution of weather and climate.
- 126 THE DESTRUCTION OF CALIFORNIA 3 UNITS**
 (25) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A historical study of each general region in California (seashore, mountain, valley, desert) in terms of five ingredients (land, vegetative cover, fauna, water, and air), including for each region an analysis of (1) the processes involved in producing the present condition, (2) the justification behind each process, (3) remedial action taken or suggested, and (4) a prognosis.

GEOLOGY

- 050 A SURVEY OF EARTH SCIENCE 3 UNITS**
 (50) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 A generalized study of the physical and historical aspects of geology and related earth science fields. Special field trips of general interest will be arranged.
- 052 COMMON ROCKS AND MINERALS 2 UNITS**
 (52) PREREQUISITE: None.
 LECTURE 1 hour per week and
 LABORATORY 2 hours per week and field trips.
 An introduction to the common minerals and rocks found in the earth's crust, with emphasis on California localities. Includes simple methods of identification, description and economic importance of these materials. Selected field trips will be undertaken to local rock and mineral sites.

- 100 PHYSICAL GEOLOGY 4 UNITS**
 (1) PREREQUISITE: None.
 LECTURE 3 hours per week and
 LABORATORY 3 hours per week and field trips.
 An introduction to the study of earth materials, structures and the processes shaping the surface of the earth. Laboratory studies are closely coordinated with lecture topics.
- 112 HISTORICAL GEOLOGY 4 UNITS**
 (4) PREREQUISITE: Completion of a Geology course.
 LECTURE 3 hours per week and
 LABORATORY 3 hours per week and field trips.
 A study of the geologic history of the earth, including the chronological development of major continental features, the interpretation of earth history from rock records, and the evolutionary development of plant and animal life. Laboratory studies are closely coordinated with lecture topics.
- 150 MAN AND HIS GEOLOGIC ENVIRONMENT 3 UNITS**
 (6) PREREQUISITES: None.
 LECTURE 3 hours per week.
 An introduction to the inter-relationships among geologic processes, earth materials and man. Discusses such topics as population, geologic hazards (landslides, mudflows, earthquakes, volcanism, etc.), mineral fuels and mineral resources and environmental impact of their extraction, and other problems of a geologic nature related to massive urbanization. Particular emphasis will be placed upon case studies within California.
- 226 SPECIAL PROBLEMS IN GEOLOGY 1 UNIT**
 (22A-D) PREREQUISITE: Completion of or concurrent enrollment in a Geology course.
 LABORATORY 3 hours per week per unit.
 A course for selected students who are interested in furthering their knowledge of geology at the independent study level. Special problems will involve library research and laboratory projects and/or field studies. (May be repeated for a maximum of 4 units.)
- 250 GEOLOGY OF CALIFORNIA 3 UNITS**
 (7) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 A survey course in the physical and historical geology of California. Emphasis is given to the characteristic geologic record of the 12 geomorphic provinces into which the state is divided.
- 251 GEOLOGY OF NATIONAL PARKS AND MONUMENTS 3 UNITS**
 (8) PREREQUISITE: None.
 LECTURE 3 hours per week and field trips.
 A study of the geology of selected national parks and monuments of the United States, with particular emphasis on the geologic processes which formed them.

252 GEOLOGY FOR THE SPACE AGE 3 UNITS

(5) PREREQUISITE: None.

LECTURE 3 hours per week.

This course is a descriptive survey course designed to introduce the student to the results and some of the problems raised by geologic studies related to the space age. Topics to be discussed include meteorites and meteorite impact craters; terrestrial geology done with the aid of satellites; geologic investigations on the moon; and the geologic nature of other planets in the solar system.

GERMAN

155 ELEMENTARY GERMAN I 5 UNITS

(1) PREREQUISITE: None.

LECTURE 5 hours per week and

LABORATORY 1 hour per week.

Comprehension, conversation, reading, and composition, including drill in essential grammar, at the elementary level.

165 ELEMENTARY GERMAN II 5 UNITS

(2) PREREQUISITE: German 155, or German 150 and 151, or two years of high school German.

LECTURE 5 hours per week and

LABORATORY 1 hour per week.

A continuation of German 155.

175 INTERMEDIATE GERMAN I 4 UNITS

(3) PREREQUISITE: German 165, or German 160 and 161, or three years of high school German.

LECTURE 4 hours per week and

LABORATORY 1 hour per week.

Composition and conversation, including a review of grammar, plus extensive and intensive reading of practical as well as literary German.

185 INTERMEDIATE GERMAN II 4 UNITS

(4) PREREQUISITE: German 175 or four years of high school German.

LECTURE 4 hours per week and

LABORATORY 1 hour per week.

A continuation of German 175.

225 GERMAN GRAMMAR AND COMPOSITION 2 UNITS

(25A-B) PREREQUISITE: German 185.

LECTURE 2 hours per week.

An intensive review of the major concepts of German grammar with considerable practice in usage, composition, and idiomatic application of these principles.

242 GERMAN CULTURE AND CIVILIZATION 3 UNITS

(42A-B) PREREQUISITE: None.

LECTURE 3 hours per week.

Class reading and discussion of the salient points of the culture and civilization of German, along with adequate outside reading and research. This class is conducted in English.

HEALTH EDUCATION

101 HEALTH EDUCATION 2 UNITS

(1) PREREQUISITE: None.

LECTURE 2 hours per week.

The meaning of health as a fundamental quality of human life. Emphasis is placed upon the importance of participation in a positive health program for the individual and the community.

HISTORY

100•101 HISTORY OF THE UNITED STATES 3 UNITS

(17A-B) PREREQUISITE: None. Courses need not be taken in sequence.

LECTURE 3 hours per week.

A general survey of the history of the United States from the Age of Discovery to the present. Emphasis on political, social, and cultural developments. First semester deals with the United States from its discovery through the Reconstruction period until 1900. Second semester deals with the 20th century.

112 ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS

(12) PREREQUISITE: None.

LECTURE 3 hours per week.

Economic analysis of American history from exploration and colonization to the present. Emphasis on the growth and development of the American economy's major sectors: industry, commerce, transportation, finance, factor markets.

120 PROBLEMS AND ISSUES IN AMERICAN REFORM 3 UNITS

(33) PREREQUISITE: None.

LECTURE 3 hours per week.

An intensive in-depth study of American history. Studies historical, political and philosophical ideas and issues of American reform. The 20th century.

135 RELIGION IN AMERICA 3 UNITS

(35) PREREQUISITE: None.

LECTURE 3 hours per week.

A study of the principal figures, issues and trends in religious liberty in America; religion and social protest; the Black religious experience; Catholic, Protestant, Jew, and contemporary religious phenomena.

137 HISTORY OF AMERICAN MINORITIES 3 UNITS

(37) PREREQUISITE: None.

LECTURE 3 hours per week.

A survey of American minorities from the Colonial Period to the present, with an emphasis on the California minorities, the Mexican-American and the Negro and the Oriental.

138•139 AFRO-AMERICAN STUDIES 3 UNITS

(38A-B) PREREQUISITE: None. Courses need not be taken in sequence.

LECTURE 3 hours per week.

First semester is a survey of African origins, slave societies, slave revolts, abolitionism, and conventions to the Civil War. Second semester is a survey of Afro-American history in Reconstruction, Booker T. Washington era, Harlem renaissance, and the Civil Rights and Black Power movements to the present.

- 142 MEXICAN-AMERICAN STUDIES 3 UNITS**
 (40) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A course designed to study the culture and achievements in politics, agriculture, and the arts of the Mexican-American in the Southwest.
- 145 HISTORY OF CALIFORNIA 3 UNITS**
 (39) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A survey of California history from the Colonial times to the present, including its diverse social, political, economic, and cultural development.
- 153 HISTORY OF MEXICO 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 A survey of the development of Mexico from its early Indian agrarian, colonial beginning to its present industrial growth. The themes are Mexico's cultural, social and political changes.
- 160•161 HISTORY OF WESTERN CIVILIZATION 3 UNITS**
 (4A-B) PREREQUISITE: None. Courses need not be taken in sequence.
 LECTURE 3 hours per week.
 A survey course emphasizing the political, economic, social, and intellectual developments that form the basis for Western Civilization; emphasis is on reading in sources and interpretations and the writing or research and essay examinations.
- 163 HISTORY OF ENGLAND 3 UNITS**
 (5) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A cultural, historical approach to the rise of the English people; emphasis on the extension of British culture, economic and political influence over the world in the British Empire and the Commonwealth of Nations.
- 166•167 CULTURAL AND HUMANISTIC 3 UNITS**
 (1A-B) **HISTORY OF CIVILIZATION**
 PREREQUISITE: None. Courses need not be taken in sequence.
 LECTURE 3 hours per week.
 An integrated course in the arts and thought, with its central concern being the creative achievements of man. Eastern and Western cultures are studied from antiquity to modern time. The artistic, rational, and spiritual dimensions of man are probed in order to determine how certain philosophical, religious, scientific, and aesthetic attitudes develop.
- 166-deals with the culture problems and achievements of the Classical and Judeo-Christian worlds, roughly from 750BC to 1450AD.
- 167-deals with the cultural problems and achievements of the medieval renaissance and modern world, roughly from 1450 to the present.

174•175 HISTORY OF ASIAN CIVILIZATION 3 UNITS

(19A-B) PREREQUISITE: None. Courses need not be taken in sequence.
LECTURE 3 hours per week.

History of Asian civilization from earliest times to the present, with emphasis on the cultural foundations of Asian nations and peoples. First semester covers the early traditional cultures of China, Japan, India, and Southeast Asia. Second semester covers the colonial and modern periods.

179 AFRICAN CIVILIZATION 3 UNITS

(27) PREREQUISITE: None.

LECTURE 3 hours per week.

A survey of Africa, prehistory, art, and culture, including European exploration and imperialism to contemporary nationalism.

222•223 SPECIAL PROBLEMS IN HISTORY 1-3 UNITS

224 PREREQUISITE: Completion of or concurrent enrollment in a
(22A-C) History course.

LABORATORY 3 hours per unit per week.

A course for selected students who are interested in furthering their knowledge of history on an independent study basis. Assigned reading, research projects, and conferences. (May be repeated for a maximum of 12 units.)

HORTICULTURE - (See AGRICULTURE)

INTERDISCIPLINARY STUDIES

100 INDIVIDUAL AND GROUP STUDIES 1/2-3 UNITS

PREREQUISITE: None.

LECTURE 8-51 hours per semester and

LABORATORY 20-153 hours per semester.

Topics of interest in personal development will be presented in independent or group activity mode. Topics will be taken from the fields of humanities, social sciences, sciences, behavior sciences and other appropriate areas.

130 CONTEMPORARY ISSUES: ETHICAL ISSUES IN MODERN MEDICINE 1-3 UNITS

PREREQUISITE: None.

LECTURE 1-3 hours per week.

Survey and analysis of the value conflicts and ethical dilemmas brought on by advances in the biomedical sciences. Topics to be discussed include: genetic management, abortion, euthanasia, informed consent, behavior control, rights to health care, allocation of medical resources, and the goals of medicine. Alternative ethical theories will be explained and applied to the various issues. Continuing education credit for nurses.

132 LITERATURE AND CULTURE OF THE BIBLE 3 UNITS

PREREQUISITE: None.

LECTURE 3 hours per week.

The English Bible as literature and as religion, including an examination of the types of literature found in the Bible, the historical and religious context in which the literature was developed, and an extensive reading of the two testaments.

150 CREATIVITY AND THE ARTS**3 UNITS**

PREREQUISITE: None.

LECTURE 3 hours per week.

Appreciation of an involvement in the language of creativity, with explorations in the creative process, the functions of art and philosophies of style and including creative projects utilizing the language of painting, sculpture, architecture, drama, movies, music, dance, poetry and television in order to gain an appreciation of how man creates through various media.

MARKETING**098 MARKETING WORK EXPERIENCE 4 UNITS**
(98A-D) PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.

LECTURE 1 hour per week and

WORK EXPERIENCE 15 hours per week.

This course is designed to extend the student's vocational learning opportunities through employment in the Marketing profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

101 MARKETING 3 UNITS

(1) PREREQUISITE: None.

LECTURE 3 hours per week.

A course dealing with the principles and methods of marketing as practiced by all successfully managed business firms. The course is management-oriented and covers such topics as demand analysis, forecasting, product development, price determination, distribution channels, material handling, advertising and personal selling.

105 SALESMANSHIP PRINCIPLES 3 UNITS

(10) PREREQUISITE: None.

LECTURE 3 hours per week.

The psychology involved in selling services, goods, ideas, and one's own personality. The problems of analyzing the sales talk, making an adequate approach, meeting objections and excuses, techniques of closing the sale, and other problems in selling are included.

110 ADVERTISING 3 UNITS

(11) PREREQUISITE: None.

LECTURE 3 hours per week.

Principles, purposes, and practices of advertising: analysis of the channels of trade, the importance of the correct appeal, style, trademarks, headlines, typography, color, layout, ethics, and other problems involved in effective advertising. No artistic ability is required.

115 RETAILING PRINCIPLES 3 UNITS

(13) PREREQUISITE: None.

LECTURE 3 hours per week.

A course dealing with the principles and methods of modern retailing. The course is management-oriented and covers such topics as the research of customer demands, store location and layout, how to buy and price merchandise, inventory control, promotion, and management of sales people.

- 121 PRINCIPLES OF BUYING AND MERCHANDISE MANAGEMENT** **3 UNITS**
 PREREQUISITE: Marketing 115 or Business Administration 105.
 LECTURE 3 hours per week.
 This course is designed for both the student presently working in a retail store and those hoping to enter the field of retailing and to rise in the management structure. The course will cover the role of the retail buyer, selection of fashion, softgoods and hardgoods, merchandise mathematics, development of buying plans, supervision of subordinate personnel and the legal aspects of the buying function. The role and functions of the modern-day merchandise manager are also covered.
- 125 PRINCIPLES OF VISUAL MERCHANDISING** **3 UNITS**
 PREREQUISITE: Marketing 115 or Business Administration 105.
 LECTURE 3 hours per week.
 This course is designed for both the student presently working in a retail store and those hoping to enter the field of retailing and to rise in the management structure. The course will cover principles and techniques of store layout, principles of window and in-store display, elements of fashion coordination and planning of sales promotion programs, fashion shows and special events presentations.
- 212 SALES MANAGEMENT** **3 UNITS**
 (12) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A detailed study of the important aspects and activities of the sales manager. The course includes analysis of the sales force, recruitment, training, compensation, motivation, and control.

MATHEMATICS

- 001 REVIEW ARITHMETIC** **3 UNITS**
 (60) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A review of the fundamental operations involving whole numbers, fractions, decimals, and percents. A simple introduction to the set of integers and basic Algebra.
- 021 INTRODUCTION TO MODERN MATHEMATICS** **3 UNITS**
 (57) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Course includes sets, numbers and arithmetic operations, logic, fractional numbers, geometry and measurement, functions, data, graphs and statistics and problem solving. This course is suitable for teacher aides in the classroom and for parents. Many illustrations from the state series and use of such visual aids as cuisenaire rods and geoboard.
- 035 THE METRIC SYSTEM** **1 UNIT**
 (61) PREREQUISITE: None.
 LECTURE 1 hour per week.
 An introduction to the metric system. Particular emphasis will be given to basic quantities such as length and weight (mass). This course will cover the definition of the basic units, interrelationship of metric units, and relation to British units.

- 051 REVIEW ARITHMETIC AND 3 UNITS**
(51) INTRODUCTION TO ALGEBRA
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Arithmetic review including fractions, decimals, percentages, ratios, signed numbers, radicals and exponents. Introduction to simple algebra: Calculation of areas and volumes and the normal dimensions needed by members of our society.
- 090 ELEMENTARY ALGEBRA 4 UNITS**
(50) PREREQUISITE: None.
 LECTURE 4 hours per week.
 Basic topics in algebra including operations with signed numbers and algebraic expressions; first and second degree equations; special products and factoring; algebraic fractions; ratio and proportions; systems of equations; introduction to radicals and exponents.
- 104 INTERMEDIATE ALGEBRA 4 UNITS**
(1) PREREQUISITE: Math 090.
 LECTURE 4 hours per week.
 Further review/study of basic topics of algebra, including properties of real numbers; multiplication, division, and factorization of polynomials; fractions, exponents and radicals: equations and inequalities of first and second degree; systems of equations; functions and their graphs; exponential and logarithmic functions; complex numbers.
- 105 PLANE TRIGONOMETRY 4 UNITS**
(2) PREREQUISITE: Math 104.
 LECTURE 4 hours per week.
 Trigonometric functions, identities and equations, solution of triangles, inverse trigonometric functions, vectors and complex numbers.
- 108 INTRODUCTION TO PROBABILITY 4 UNITS**
(8) AND STATISTICS
 PREREQUISITE: Math 104 recommended.
 LECTURE 4 hours per week.
 Descriptive, probability and inferential statistics will be covered on an introductory basis—application will be made to the fields of natural sciences, business, economics. and behavioral sciences.
- 138 MODERN ELEMENTARY MATHEMATICS I 4 UNITS**
(38A) PREREQUISITE: One year each of high school algebra and geometry.
 LECTURE 4 hours per week.
 Introduction to logic, elementary set theory, finite systems, elementary number theory, structure and properties of the systems of natural numbers, whole numbers, integers. rational numbers and real numbers.

- 153 ANALYTIC GEOMETRY AND CALCULUS 4 UNITS**
 (3A) PREREQUISITE: Math 105, high school trig recommended.
 LECTURE 4 hours per week.
 Analytic Geometry of the straight line and the circle, functions, limits, derivative of algebraic functions, applications of derivatives including maxima and minima, graphing, rate of change; anti-derivatives.
- 154 ANALYTIC GEOMETRY AND CALCULUS 4 UNITS**
 (3B) PREREQUISITE: Math 153.
 LECTURE 4 hours per week.
 Limits, definite integral and applications, fundamental theorem of integral calculus, derivative and integrals of trigonometric, inverse trigonometric functions, exponents, logarithms, and hyperbolic functions; methods of integration.
- 201 ALGEBRA AND FINITE MATHEMATICS 3 UNITS**
 (41) PREREQUISITE: Business Administration 052 and Math 090.
 LECTURE 3 hours per week.
 A study of algebra, including; simplifications, first and second degree equations in one variable, introduction to matrices, and business application involving compound interest and annuities.
- 204 QUANTITATIVE ANALYSIS 3 UNITS**
 (42) PREREQUISITE: 2 years of high school algebra.
 LECTURE 3 hours per week.
 Contemporary quantitative methods for students in economics and business emphasizing the application of these tools to the problems of economic theory and modern-day business. Fundamentals of algebra, matrix algebra, linear programming, functions, differential and integral calculus fundamentals.
- 253 ANALYTIC GEOMETRY AND CALCULUS 4 UNITS**
 (4A) PREREQUISITE: Math 154.
 LECTURE 4 hours per week.
 Parametric equations, polar coordinates, indeterminate forms, infinite series and Taylor's formula, approximations. solid analytic geometry.
- 254 ANALYTIC GEOMETRY AND CALCULUS 4 UNITS**
 (4B) PREREQUISITE: Math 253.
 LECTURE 4 hours per week.
 Functions of several variables, partial differentiation, multiple integration, line and surface integrals, introduction to differential equations.

MICROBIOLOGY

- 150 BASIC MICROBIOLOGY 5 UNITS**
 (2) PREREQUISITE: Chemistry 101 or prior biology course recommended.
 LECTURE 3 hours per week and
 LABORATORY 6 hours per week.
 A beginning course in microbiology and bacteriology, designed for the general student and several majors in the paramedical sciences. The course deals with the broad biological aspects of microorganisms as related to man and his environment.

- 203 GENERAL MICROBIOLOGY 5 UNITS**
 (1A) PREREQUISITE: Chemistry 160 with concurrent enrollment in Chemistry 214 desirable.
 LECTURE 3 hours per week and
 LABORATORY 6 hours per week.
 An introductory course at the pre-professional level in microbiology and bacteriology, dealing with the morphology, physiology, ecology, genetics, medical, and immunological aspects of microorganisms.

MUSIC

- 100 FUNDAMENTAL SKILLS IN MUSIC 3 UNITS**
 (1) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Sight reading of materials found in music; development of sight reading techniques; rhythmic expression and notation; simple melodic dictation and harmonization. Particularly designed for pre-education majors.
- 101 MUSIC THEORY I 5 UNITS**
 PREREQUISITE: None.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 Beginning work in sightsinging, dictation, rhythms, scales, signatures, elementary harmony from the common practice period.
- 102 MUSIC THEORY II 5 UNITS**
 PREREQUISITE: Music 101.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 A continuation in the development of musical skills to include sightsinging, dictation, intermediate harmony through secondary dominants.
- 112 JAZZ THEORY AND MUSICIANSHIP 3 UNITS**
 (6A) PREREQUISITE: Ability to read music.
 LECTURE 3 hours per week.
 A contemporary approach to the elements of jazz theory with emphasis on beginning techniques in jazz improvisation.
- 113 JAZZ THEORY AND MUSICIANSHIP 3 UNITS**
 (6B) PREREQUISITE: Music 112.
 LECTURE 3 hours per week.
 A contemporary approach to the elements of jazz theory with emphasis on intermediate techniques in jazz improvisation.
- 115 MUSIC COPYING 2 UNITS**
 (9) PREREQUISITE: Ability to read music.
 LECTURE 2 hours per week.
 The course is designed to teach the musician to prepare his written music for performance. The course will include instruction in the areas of copying equipment, copying techniques, professional requirements, and special problems in copying.

- 120•121 APPRECIATION OF MUSICAL LITERATURE 3 UNITS**
 (10A-B) PREREQUISITE: None. Courses need not be taken in sequence.
 LECTURE 3 hours per week.
 Designed to aid the average student in developing an understanding and enjoyment of the music of the great composers; presentation of vocal and instrumental compositions, including choral and orchestral forms, with emphasis upon the problems of the musically untrained listener.
- 124 SURVEY OF MUSIC LITERATURE 3 UNITS**
 PREREQUISITE: Ability to read music.
 LECTURE 3 hours per week and
 LABORATORY 1 hour per week.
 A study of selected musical literature from the various historical periods with emphasis on formal developments and stylistic characteristics of each work. Designed for the Music Major, but open to all.
- 125 SURVEY OF MUSIC LITERATURE 3 UNITS**
 PREREQUISITE: Ability to read music.
 LECTURE 3 hours per week and
 LABORATORY 1 hour per week.
 A study of selected musical literature from the various historical periods with emphasis on formal developments and stylistic characteristics of each work. Designed for the Music Major, but open to all.
- 128 CLASS ORGAN I 2 UNITS**
 PREREQUISITE: 2 years of piano.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Introduction to the organ as a unique musical instrument; two-part manual playing; beginning pedal studies; introduction to simple hymn playing, phrasing and articulation.
- 129 CLASS ORGAN II 2 UNITS**
 PREREQUISITE: Music 128.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 A continuation of Music 128. Instruction to include manual and pedal work, three voice compositions. registration techniques.
- 130•131 ELEMENTARY VOICE 2 UNITS**
 (7A-B) PREREQUISITE: Ability to match pitches.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Instruction in how to use the voice properly in both singing and speaking. Includes techniques in posture, breathing, breath control, tone color, diction. Use of simple musical repertoire and beginning interpretation.
- 132 ELEMENTARY GUITAR 2 UNITS**
 (8A) PREREQUISITE: Student must have his own instrument.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 This course will provide the beginning student of guitar with a basic working knowledge of technique and musicianship. The goal of the course is to obtain the optimum of player ability from each student.

- 133 INTERMEDIATE GUITAR** **2 UNITS**
 PREREQUISITE: Music 132.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Instructions in chords and arpeggios in all keys. Improvisation, accompaniment, sight-reading, transposition, folk, classical and jazz styles.
- 143 WOODWIND, BRASS AND** **1 UNIT**
 (20A-D) **STRING INSTRUCTION**
 PREREQUISITE: Ability to match pitches and perform basic manual skills.
 STUDIO 2 hours per week.
 Private instruction on wind instruments is offered at no extra cost, both on a beginning and advanced basis. Before instruction is offered, each student is given an interview and examined for aptitude. Music majors interested in learning a second instrument are encouraged to avail themselves of this opportunity, and will be given priority over other beginners. In almost every case it will be necessary for students to rent or purchase their own instruments. (May be taken 4 times for credit.)
- 145 ELEMENTARY PIANO I** **2 UNITS**
 PREREQUISITE: None. Recommend Music 100.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Beginning class piano instrument to include elementary scale techniques, sight-reading, and ensemble playing.
- 146 ELEMENTARY PIANO II** **2 UNITS**
 PREREQUISITE: Music 145.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Continuing class instruction in basic piano techniques, scales, sight-reading, basic literature, ensemble playing.
- 149 MIXED CHORUS** **1 UNIT**
 (21A-D) PREREQUISITE: Ability to match pitches.
 STUDIO 3 hours per week.
 Foundation techniques in such aspects of choral music as breathing, posture, tone-production, enunciation and musicianship, especially recommended for pre-teaching and liberal arts majors who desire vocal training. (May be taken 4 times for credit.)
- 156 CONCERT CHOIR** **2 UNITS**
 (25A-D) PREREQUISITE: Ability to match pitches.
 STUDIO 4 hours per week.
 Study and performance of outstanding representative choral works from all periods of music history. (May be taken 4 times for credit.)
- 160 WIND INSTRUMENT ENSEMBLE** **1 UNIT**
 (22A-D) PREREQUISITE: Ability to match pitches and perform basic manual skills.
 STUDIO 2 hours per week.
 Study of the literature available for the particular ensemble under consideration, studies in appreciation and performance of standard works. (May be taken 4 times for credit.)

- 169 COLLEGE CONCERT BAND 2 UNITS**
 (29A-D) PREREQUISITE: Intermediate or higher performance level on a traditional band instrument.
 STUDIO 4 hours per week.
 Studies in band literature, training and experience in traditional and contemporary repertoire, previous band experience necessary. (May be taken 4 times for credit.)
- 171 STAGE BAND 2 UNITS**
 (42A-D) PREREQUISITE: Intermediate or higher performance level on a traditional "big band" instrument.
 STUDIO 4 hours per week.
 Opportunity to learn the techniques and repertoire of the current jazz and stage band. (May be taken 4 times for credit.)
- 180 REHEARSAL AND PERFORMANCE 1-2 UNITS**
 (24A-D) PREREQUISITE: Advanced performance ability on an instrument or voice.
 STUDIO 2 hour per week per unit.
 Vocalist's and instrumentalist's preparation and performance of musical plays, operettas, operas, or oratorios for public performance. (May be taken 4 times for credit.)
- 186 STRING ENSEMBLE 1 UNIT**
 (27A-D) PREREQUISITE: Ability to match pitches.
 STUDIO 2 hours per week.
 Study of the literature available for the particular ensemble under consideration, studies in appreciation and performance of standard works. (May be taken 4 times for credit.)
- 201 MUSIC THEORY III 5 UNITS**
 PREREQUISITE: Music 102.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 A continuation in the development of musical skills to include sight-singing, diction, intermediate harmony through nondominant seventh chords.
- 202 MUSIC THEORY IV 5 UNITS**
 PREREQUISITE: Music 201.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 Advanced work in sight-singing, diction, advanced harmony to include common practice harmony through augmented sixths, extensions into scalar and chordal harmonies, extended chromaticism, elementary twelve tone relationships.
- 212 JAZZ THEORY AND MUSICIANSHIP 3 UNITS**
 (6C) PREREQUISITE: Ability to read music, knowledge of scales and elementary chord construction.
 LECTURE 3 hours per week.
 A contemporary approach to the elements of jazz theory with emphasis on elementary arranging.
- 213 JAZZ THEORY AND MUSICIANSHIP 3 UNITS**
 (6D) PREREQUISITE: Music 212.
 LECTURE 3 hours per week.
 A contemporary approach to the elements of jazz theory with emphasis on intermediate techniques in arranging.

- 228 CLASS ORGAN III 2 UNITS**
 PREREQUISITE: Music 129.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 A continuation of Music 129. Instruction to include manual and pedal work, trio exercises, registration techniques, hymns.
- 229 CLASS ORGAN 2 UNITS**
 PREREQUISITE: Music 228.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 A continuation of Music 228. Instruction to include advanced manual and pedal work; playing of a variety of organ literature and hymns with emphasis on style, interpretation, and registration.
- 232 ADVANCED GUITAR 2 UNITS**
 PREREQUISITE: Music 133.
 LECTURE 1 hour per week and
 LABORATORY 2 hours per week.
 Instruction of advanced chords of the jazz and pop styles, instruction of major and minor scales. Introduction of the literature and style of classical guitar.
- 233 ADVANCED GUITAR 2 UNITS**
 PREREQUISITE: Music 232.
 LECTURE 1 hour per week and
 LABORATORY 2 hours per week.
 Instruction of the style and literature of both solo and ensemble guitar of the different periods of music history. Introduction of three octave scales in all keys. Development of skills in rare time meters and rhythms.
- 245 INTERMEDIATE PIANO I 2 UNITS**
 PREREQUISITE: Music 146.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Intermediate level class instruction to include keyboard techniques, ensemble playing, musicianship skills.
- 246 INTERMEDIATE PIANO II 2 UNITS**
 PREREQUISITE: Music 245.
 LECTURE 1 hour per week and
 STUDIO 2 hours per week.
 Continued intermediate level class instruction to include keyboard techniques, ensemble playing, musicianship skills.

OCCUPATIONAL SAFETY AND HEALTH

- 111 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 An introduction to the principles of occupational safety and health. A survey course covering the basic principles and techniques. Required for OSH majors and suitable for management and supervisory certificate students.

- 112 SAFETY AND HEALTH STANDARDS 3 UNITS**
CODES AND REGULATIONS
 PREREQUISITE: OSH 111 (may be taken concurrently).
 LECTURE 3 hours per week.
 A review of the important occupational safety and health standards and codes with particular emphasis on application of these codes to typical work situations.
- 113 PHYSICAL HAZARDS CONTROL I 3 UNITS**
 PREREQUISITE: OSH 111.
 LECTURE 3 hours per week.
 An examination of physical hazards in the world environment and methods of control.
- 120 SAFETY PROGRAM MANAGEMENT 3 UNITS**
 PREREQUISITE: OSH 111.
 LECTURE 3 hours per week.
 Designed to acquaint the student with the common elements of a modern safety program.

OCEANOGRAPHY

- 101 ELEMENTS OF OCEANOGRAPHY 3 UNITS**
 (10) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A general survey course in the four major aspects of oceanography: physical, geological, chemical, and biological.
- 160•161 INTRODUCTION TO FIELD OCEANOGRAPHY 2 UNITS**
162 PREREQUISITE: A college course in life or physical science
 (16A-C) with a grade of "C" or better.
 LECTURE 1 hour per week and
 LABORATORY 3 hours per week.
 Demonstration and practice of field techniques in oceanography including water sampling and testing for salinity, temperature, oxygen and pH. Collection and analysis of plankton and nekton samples, use of taxonomic keys, and a study of the geologic processes of the marine environment.

OPTICIANRY

- 010 OPHTHALMIC ORIENTATION 3 UNITS**
 (51) PREREQUISITE: None.
 LECTURE 3 hours per week.
 An introduction to Ophthalmic Dispensing, its history and evolution. Basic nomenclature, theory of light, refraction, anatomy, prescription identification and the overall look at dispensing will be discussed.
- 012 OPHTHALMIC LAB TECHNIQUES I 4 UNITS**
 (52A) PREREQUISITE: None.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 Theory and practice in Ophthalmic lens surfacing operations, layout, blocking, generation, fining and polishing of single vision and bifocal lenses. Also the surface techniques of materials other than crown glass, i.e. Highlite, Cr-39 or flint.

- 014 OPHTHALMIC LAB TECHNIQUES II 4 UNITS**
 (52B) PREREQUISITE: Ophthalmic Dispensing 012.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 Theory and practice in ophthalmic bench procedures, layout, edging, lens hardening, and mounting of single vision and multi-focal lenses to produce a pair of spectacles.
- 016 OPHTHALMIC LENSES 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 To give the student a broad knowledge of lenses and design, this course will develop the theory of: lens manufacture, construction, radius of curvature, index of refraction, effective power, multi-focals, absorptive lenses, lenticular & aspherics.
- 018 OPHTHALMIC FABRICATION I 2 UNITS**
 (54A) PREREQUISITE: Ophthalmic Dispensing 012.
 LECTURE 1 hour per week and
 LABORATORY 2.5 hours per week.
 Intensified instruction of finished laboratory procedures, including prescription verification, layout, marking, and edging into rimless, semi-rimless and tension mount frames. The application various types of automatic bevel-edging equipment commonly found in optical establishments for rimless work. Concentration on complete prescription spectacle fabrication including all types of frames. The procedure used to prepare press-on prisms. The edging and insertion of lenticular lenses and surfacing techniques of bicentric grinding.
- 020 OPHTHALMIC FABRICATION II 2 UNITS**
 (54B) PREREQUISITE: Ophthalmic Dispensing 018.
 LECTURE 1 hour per week and
 LABORATORY 2.5 hours per week.
 Instruction in general repairs to both plastic and metal frames, including soldering gold-filled parts. The care and maintenance of lens neutralizing instruments to include calibration techniques. The care and maintenance of the automatic diamond bevel edgers. Continuation of all phases of finishing laboratory providing the opportunity to develop proficiency in the learning skills.
- 022 ANATOMY AND PHYSIOLOGY OF THE EYE 3 UNITS**
 (55) PREREQUISITE: None.
 LECTURE 3 hours per week.
 Introduction to the anatomy and physiology of the human eye dealing primarily with the study of vision and the relation and function of certain anatomical structures to the visual process. The refractive media, retinal chemistry and neurology, and the muscular systems of the eye are to be considered.
- 024 OPHTHALMIC DISPENSING TECHNIQUES I 5 UNITS**
 (56A) PREREQUISITE: Ophthalmic Dispensing 010, 012, 014.
 LECTURE 3 hours per week and
 LABORATORY 5 hours per week.
 Single vision and multifocal prescription analysis. The reasons and

devices used in determining pupillary distances and their measurements. Introduction to ophthalmic dispensing hand tools. Writing the spectacle order, and formulating the dispensing procedure.

- 026 OPTHALMIC DISPENSING TECHNIQUES II 5 UNITS**
(56B) **PREREQUISITE:** Ophthalmic Dispensing 024.
LECTURE 3 hours per week and
LABORATORY 5 hours per week.
The set-up of a clinical procedure to introduce the student to "live" patients. Analysis of complex or unusual Rx's, e.g., cataract, bi-centric, low vision aids, Ptosis crutch, moist chambers. Vertex Distance considerations. Fashion Dispensing will be introduced and discussed.
- 028 GEOMETRIC OPTICS 3 UNITS**
PREREQUISITE: High School geometry.
LECTURE 3 hours per week.
A study of the history and theories of light, rectilinear propagation of light, reflection and refraction at plane and spherical surfaces, and in prisms. Also included are thin lenses and thick lenses, refraction, relationships between the focal length of the lens, object and image distance, and the study of the electromagnetic spectrum and lens aberrations, selected optical instruments and other aspects of general physical optics as they apply to the optician.
- 032 CONTACT LENSES I 3 UNITS**
PREREQUISITE: Completion of first year of Opticianry or corequisite of Opt 022.
LECTURE 2 hours per week and
LABORATORY 2.5 hours per week.
History, development and manufacture of contact lenses. Anatomical data of the eye, with emphasis on the cornea. Clinical application of contact lenses, indications and contra-indications. Examination and patient selection. Introduction to the instruments used, with special emphasis given to the Keratometer and Ophthalmometer. Use of the Radiuscope, Diameter Gauge, Thickness Gauge, and Measuring Magnifier. Computation of the contact lens order for the laboratory.
- 034 CONTACT LENSES II 4 UNITS**
(59B) **PREREQUISITE:** Ophthalmic Dispensing 032.
LECTURE 2 hours per week and
LABORATORY 5 hours per week.
The disciplines involved in manufacturing and fitting present day corneal and scleral contact lenses, symtology contact lens pharmacology, and custom contact lens design. Insertion, removing and handling of contact lenses. Staining procedures and patient evaluation.
- 036 OPTHALMIC DISPENSING SEMINAR 1 UNIT**
(60) **PREREQUISITE:** Completion of Ophthalmic Dispensing 026 & 034.
LECTURE 1 hour per week.
Ethics of the profession. Review of the American Board of Opticianry test. Discussion of job opportunities. Term paper on the establishment of a typical Ophthalmic Dispensing practice. Guest speakers to present topics pertinent to the dispensing practice.

- 040 ADVANCED LABORATORY PROCEDURES 1 UNIT**
 PREREQUISITE: Ophthalmic Dispensing 012, 014.
 LABORATORY 3 hours per week.
 Advanced Ophthalmic Laboratory procedures to provide experience in spectacle fabrication; and work flow in a typical ophthalmic laboratory. The procedures of surfacing lens grinding, finishing and inspection of the complete spectacle will be emphasized.
- 098 OPHTHALMIC DISPENSING WORK EXPERIENCE 4 UNITS**
 (98A-D) PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.
 LECTURE 1 hour per week and
 WORK EXPERIENCE 15 hours per week.
 This course is designed to extend the student's vocational learning opportunities through paid employment in the optical profession, for which the student's college program has been designed. The student must be enrolled in a planned program.
- 201 REVIEW COURSE FOR N.A.O. EXAM 1 UNIT**
 (101) PREREQUISITE: None.
 LECTURE 1 hour per week.
 A course which assumes that the student has a prior knowledge of the materials on the National Academy of Opticianry Exam but wishes a review course to accentuate the most necessary material in Ophthalmic Dispensing, Laboratory, Geometric Optics, Anatomy and Physiology and Contact Lenses.
- 203 CONTINUING EDUCATION SEMINAR 1 UNIT**
 (102) PREREQUISITE: None.
 LECTURE 1 hour per week.
 Depending on requested topics or contemporary developments in opticianry, a seminar will be offered to orient the optician to the subject matter.

PHILOSOPHY

- 062 IN SEARCH OF MEANING IN 3 UNITS**
 (62) **THE MODERN WORLD**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 An exploration of the predicament and potential of human life in the modern world, utilizing reading, lectures, movies, and discussion.
- 101 INTRODUCTION TO PHILOSOPHY 3 UNITS**
 (1) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A general introduction to the major problems of philosophy. Attention is directed to classical and modern philosophical literature as a basis for discussion of epistemology, metaphysics, ethics, and aesthetics.
- 103 INTRODUCTION TO LOGIC 3 UNITS**
 (3) PREREQUISITE: None.
 LECTURE 3 hours per week.
 An introduction to the techniques of critical thought, including language analysis, inductive and deductive logic, symbolic logic, and the development of scientific method.

105 MORAL VALUES IN TODAY'S SOCIETY 3 UNITS

(5) PREREQUISITE: None.

LECTURE 3 hours per week.

A study of moral philosophy with an analysis of the basic ideas and principles involved in moral conduct, including the concepts of good, right, obligation, and conscience. Problems of truthfulness, race, sex, marriage, and war or peace are examined in relationship to moral philosophy.

115-116 SELECTED STUDIES IN PHILOSOPHY 3 UNITS

117 PREREQUISITE: None.

(15A-C) LECTURE 3 hours per week.

An introduction to philosophical thinking through a study of a philosophical theme, period, or culture. The specific content of the course is announced each semester in the schedule of classes.

223 SPECIAL PROBLEMS IN PHILOSOPHY 1-2 UNITS

PREREQUISITE: Completion of or concurrent enrollment in a philosophy course.

LABORATORY 3 hours per week per unit.

Assigned readings, papers and conferences for students interested in furthering their knowledge of philosophy on an independent study basis. May be repeated to a maximum of 6 units.

PHOTOGRAPHY

150 B & W PHOTOGRAPHY 4 UNITS

(25A) PREREQUISITE: None. Recommend concurrent enrollment in Art 115.

LECTURE 2 hours per week and

LABORATORY 5 hours per week.

An introductory course to black and white photography that will include: camera familiarization and shooting techniques, negative and print darkroom procedures, finishing and presentation, and contemporary applications.

151 INTERMEDIATE B & W PHOTOGRAPHY 4 UNITS

PREREQUISITE: Photography 150.

LECTURE 2 hours per week and

LABORATORY 5 hours per week.

An intermediate course in black and white photography that will include: a continuation of negative and print darkroom work, individualization of shooting technique, experimentation, basic sensitometric practice, and an emphasis on portfolio preparations.

152 ADVANCED B & W PHOTOGRAPHY 4 UNITS

PREREQUISITE: Photography 150.

LECTURE 2 hours per week and

LABORATORY 5 hours per week.

An advanced course in black and white photography that will include: a continuation of negative and print darkroom work, individualization of shooting technique, experimentation, basic sensitometric practice, and an emphasis on portfolio preparation.

- 154 HISTORY OF PHOTOGRAPHY 3 UNITS**
 (24) PREREQUISITE: None.
 LECTURE 3 hours per week.
 An historical treatment of photography tracing its development from early 19th century discoveries through its evolution to the present. Both the technical innovations and the aesthetic development of photography will be stressed.
- 160 PROCESS CAMERA TECHNIQUES 3 UNITS**
 (35) PREREQUISITE: Photography 150.
 LECTURE 1 hour per week and
 LABORATORY 5 hours per week.
 An opportunity for practical experience in process camera operation and manipulation for industrial large-format photography. Line, half-tone, experimental photo-imagery, and some color separation will be stressed.
- 222 SPECIAL PROJECTS IN PHOTOGRAPHY 1-4 UNITS**
 PREREQUISITE: Completion of or concurrent enrollment in a photography course.
 LABORATORY 3 hours per week per unit.
 Independent study for selected students in any of the three emphasis areas of photography. Projects to be determined jointly by the student and instructor prior to registration. (May be repeated for a maximum of 12 units.)
- 230 PHOTOGRAPHY FOR THE NATURAL SCIENCES 2 UNITS**
 (30) PREREQUISITE: Previous or concurrent enrollment in a college Natural Science course.
 LECTURE 1 hour per week and
 LABORATORY 2 hours per week
 An introduction to scientific photography. No previous photography experience required. Topics will include macrophotography, photomicrography, astrophotography, telephotography, fluorescence and UV photography, and infrared photography. Basic darkroom technique will also be covered. The course is meant to prepare students to use photography in their own field of science. It is not meant to prepare students as professional scientific photographers.
- 250 COLOR PHOTOGRAPHY 4 UNITS**
 (27A) PREREQUISITE: Photography 152.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 Evaluation of various types of transparency and color negative print materials. Shooting, processing, printing, and quality control will be covered. Emphasis will be divided between technical and aesthetic principles.
- 252 ADVANCED COLOR PHOTOGRAPHY 4 UNITS**
 (27B) PREREQUISITE: Photography 250.
 LECTURE 2 hours per week and
 LABORATORY 5 hours per week.
 Additive and subtractive printing processes, filtration, and negative analyzing will be covered. Advanced shooting and experimental process will be stressed. Portfolio preparation to be an end measurement.

THE WORKING PHOTOGRAPHER - Photography courses at Crafton Hills College prepare the student for a career in any of the many and varied industries in which photo processes play an ever increasing role. Students are urged to develop their own portfolios for presentation to a potential employer.

PHYSICAL EDUCATION

100 ARCHERY (21A-D)	May be taken 4 times for a maximum of 4 units
104 BADMINTON (22A-B)	May be taken 4 times for a maximum of 4 units
108 BODY BUILDING (36A-D)	May be taken 4 times for a maximum of 4 units
112 BODY CONDITIONING (37A-B)	May be taken 4 times for a maximum of 4 units
116 BOWLING (20A-D)	May be taken 4 times for a maximum of 4 units
120 GOLF (24A-D)	May be taken 4 times for a maximum of 4 units
124 HANDBALL/RACQUETBALL (30A-C)	May be taken 4 times for a maximum of 4 units
148 TENNIS (27A-D)	May be taken 4 times for a maximum of 4 units
168 YOGA (Hatha) (35A-D)	May be taken 4 times for a maximum of 4 units
180 SKIING (43A-D)	May be taken 4 times for a maximum of 4 units
130 TEAM SPORTS (40A-B) Co-ed	May be taken 4 times for a maximum of 4 units

261 PERSONAL SAFETY AND DEFENSE **2 UNITS**

PREREQUISITE: None.

LECTURE 1 hour per week and

LABORATORY 2 hours per week.

Open to both men and women, self-defense and personal safety techniques for women will be emphasized along with self-awareness, avoidance measures and psychological preparedness.

262 BODY CONDITIONING AND NUTRITION **1-3 UNITS**

PREREQUISITE: None.

LECTURE 1 hour per week and

LABORATORY 3-5 hours per week.

This co-ed class is designed to provide a large number of hours for cardiovascular and strength-training exercises whereby students will condition one hour every day. Additionally, information will be given to students covering such topics as diet, nutrition, energy metabolism, weight control, etc. A good class for individuals who are serious about losing weight and conditioning.

PHYSICS

101 INTRODUCTION TO PHYSICS 4 UNITS

(10) PREREQUISITE: None.

LECTURE 3 hours per week and

LABORATORY 3 hours per week.

DISCUSSION 1 hour per week.

A nonmathematical introduction to the ideas, concepts, and theories of physics.

110•111 GENERAL PHYSICS 4 UNITS

(2A-B) PREREQUISITE: High School Physics or Physics 101 and intermediate algebra and trigonometry.

LECTURE 3 hours per week and

LABORATORY 3 hours per week.

An introduction to mechanics, heat waves, optics, electricity and atomic and nuclear physics.

200•201 PHYSICS 4 UNITS

202 PREREQUISITE: High School Physics or Physics 101. Courses must be taken in sequence.

(1A-C) COREQUISITE: 200 First Semester of College Calculus. 201 Second Semester of College Calculus. 202 Third Semester of College Calculus.

LECTURE 3 hours per week and

LABORATORY 3 hours per week.

Topics include mechanics, conservation laws, fluids, thermodynamics, wave motion, optics, electricity, magnetism, Maxwell's Equations, relativity, vector analysis, quantum theory, structure of atoms nuclei, molecules, and solids.

225 SPECIAL PROBLEMS IN PHYSICS 1-2 UNITS

PREREQUISITE: Physics 101.

LABORATORY 3-6 hours per week.

A laboratory course designed for students interested in special projects beyond the standard laboratory course. (May be repeated for a maximum of 6 units.)

POLITICAL SCIENCE

051 AMERICAN INSTITUTIONS 3 UNITS

(50) PREREQUISITE: None.

LECTURE 3 hours per week.

A general course in American government and politics designed for the nontransfer student. This course studies the basic institutions and practices of the federal government and California state government.

100 AMERICAN POLITICS 3 UNITS

(1) PREREQUISITE: None.

LECTURE 3 hours per week.

A course in United States government and politics that examines and analyzes the basic structures of American government (national, state, and local) and the major issues (both foreign and domestic) that confront the American body politic.

- 203 EUROPEAN POLITICAL SYSTEMS 3 UNITS**
 (2) PREREQUISITE: Political Science 100.
 LECTURE 3 hours per week.
 A comparative survey of constitutions, political organizations, and related social and economic institutions and processes in four European countries: Great Britain, the Soviet Union, Germany and France. Contrasting features between democratic and authoritarian systems are examined. Recommended for government, social science, and pre-teaching majors.
- 206 INTRODUCTION TO WORLD POLITICS 3 UNITS**
 (3) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A study of the basic principles and major elements of world politics, with a survey of their application in practice. Emphasis is placed on the concept of the modern sovereign state system. Conflict, war, nationalism, polarity of power, the problems of development and competing economic systems, population pressures, and a world held in check by the threat of nuclear weaponry are all considered.
- 212 INTRODUCTION TO POLITICAL SCIENCE 3 UNITS**
 (11) PREREQUISITE: Political Science 100.
 LECTURE 3 hours per week.
 A survey of the scope, methods, and interests of contemporary political science, with special emphasis on problems of political analysis. This course is required of political science majors who intend to transfer to a branch of the State university or college systems.
- 215 SELECTED TOPICS IN AMERICAN POLITICS 1-3 UNITS**
 PREREQUISITE: None.
 LECTURE 1-3 hours per week.
 A careful examination of the important events and issues in contemporary American political life, for example, the primaries and the conventions, the election of a President, etc.
- 218 INTERNATIONAL ORGANIZATION 3 UNITS**
 (5) PREREQUISITE: Political Science 100.
 LECTURE 3 hours per week.
 An introductory course in international organization dealing with the structures, functions, and procedures of the United Nations, the specialized agencies, regional organizations, international conferences, and diplomatic services. Analysis of the rudimentary rules and regulations governing interstate relations. Special emphasis will be given the integration of the principles of international law and international organization.
- 225 POLITICS OF ECOLOGY 3 UNITS**
 (25) PREREQUISITE: None.
 LECTURE 3 hours per week.
 This course will examine the major ecological issues confronting the United States in the world today in order to understand the relationship of government and politics to the coming crisis in man/environment relations. Particular emphasis will be placed on population and technology as basic variables in the impending

ecological crisis and the constraints placed on environment action by a system or government with multiple centers of decision making.

PSYCHOLOGY

025 PERSONAL DEVELOPMENTAL SKILLS 1/2-3 UNITS

PREREQUISITE: None.

LECTURE 1-3 hours per week and
LABORATORY 1-9 hours per week.

Offers an opportunity to participate in individually planned programs enabling students to be able to master basic learning skills to the level necessary for successful achievement in their major. Also designed for use by tutors to prepare them to be effective in peer tutoring. (May be taken for a maximum of 12 units. Psychology 025 and English 011 may not be repeated for more than a total of 12 units. A maximum of 6 units may be applied toward the Associate Degree.)

050 ORIENTATION 1/2 UNIT

PREREQUISITE: None.

LECTURE 1 hour per week plus 5 hours to be arranged.

This course is required of all students entering college for the first time. The class is designed to orient the student to the philosophy, rules and regulations, and services offered at the College; to assist the student in understanding the scope and function of community college education, and to guide and develop the interest and necessary skills in order that the student may properly assume the responsibility for his/her educational and vocational planning. (Course may be repeated to a maximum of two units.)

058 INTEREST INVENTORY 1/2 UNIT

(62) PREREQUISITE: None.

LABORATORY 2 hours per week.

A series of interest inventories and aptitude tests with interpretation to help the student with his/her educational/vocational planning.

065 SELF-CONFIDENCE 1-3 UNITS

PREREQUISITE: None.

LECTURE 1-3 hours per week.

Students will explore their thinking habits involved in common anxiety-causing situations and some alternative thought patterns which can lead to increasing self-understanding and self-confidence.

066 LIFE CONFIDENCE 1-3 UNITS

PREREQUISITE: Psych 065.

LECTURE 1-3 hours per week.

Students will explore various thinking techniques which can be used to enhance self-control and self-improvement in various school, career, family and social relationships. Lecture, activities and assignments will focus on practical application to these techniques to real life situations.

- 070 PEOPLE IN TRANSITION 1-3 UNITS**
 PREREQUISITE: None.
 LECTURE 1-3 hours per week.
 This course is designed to provide a basis for exploration for persons interested in or experiencing crisis, transition, role-change, or change in life style. Practical insights into problem-solving processes and use of alternatives in life-style choices. A variety of classroom experiences will include guest lecturers, seminar, group discussions, and community resources.
- 090 SELECTED TOPICS IN APPLIED PSYCHOLOGY 1-3 UNITS**
 PREREQUISITE: None.
 LECTURE 1-3 hours per week.
 This course is designed to offer topics of interest to students in the field of applied psychology.
 (May be repeated to a maximum of 12 units.)
- 103 PSYCHOLOGY OF PERSONALITY 3 UNITS**
 (3) PREREQUISITE: Psychology 107.
 LECTURE 3 hours per week.
 This course is designed to acquaint the student with factors that contribute to the development of personality. Its purpose is to help the individual become aware of and to better understand his own behavior as well as the behavior of others. The course is usually conducted rather informally on the premise that students will become personally and openly involved in the class sessions.
- 107 GENERAL PSYCHOLOGY 3 UNITS**
 (1A) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A survey of the nature and scope of psychology as a science, with consideration of facts and principles pertaining to the topics of experimental design, perception, thinking, learning, personality, psychological testing, emotion, and motivation. The essential features of the biological and neurological bases of behavior are included.
- 108 GENERAL PSYCHOLOGY 3 UNITS**
 (1B) PREREQUISITE: Psychology 107.
 LECTURE 2 hours per week and
 LABORATORY 2 hours per week.
 An advanced study of the principles of general psychology, with special emphasis on the experimental method and the psychological basis of behavior. Primarily intended for psychology majors.
- 109 INTERVIEWING AND COUNSELING TECHNIQUES 3 UNITS**
 (32) PREREQUISITE: Previous course in Psychology.
 (53) LECTURE 3 hours per week.
 Methods of interviewing and counseling for the student preparing for public service agency employment.

112 CHILD AND ADOLESCENT PSYCHOLOGY 3 UNITS

(12) PREREQUISITE: Psychology 107.

LECTURE 3 hours per week.

A survey of psychological developments of the normal individual from infancy through adolescence. The course will especially emphasize critical areas of the adolescent.

116 PSYCHOLOGY OF WOMEN 3 UNITS

(15) PREREQUISITE: None.

LECTURE 3 hours per week.

The course is designed to acquaint the student with the traditional theories regarding the feminine psyche, and with modern research results in the field of sex differences. Its purpose is to provide the student with a background from which to analyze and understand herself and issues in her daily life.

133 GROUP DYNAMICS 3 UNITS

(33) PREREQUISITE: None.

LECTURE 3 hours per week.

Examines membership in and leadership of various kinds of groups, emphasizing the group process. Under supervision, the factors involved in problems of communication, effective emotional responses, and personal growth will be highlighted.

224•225 SPECIAL PROBLEMS IN PSYCHOLOGY 1-2 UNITS

(22A-B) PREREQUISITE: Completion of or concurrent enrollment in a Psychology course.

LABORATORY 3 hours per week per unit.

Assigned reading, research projects and conferences for selected students interested in furthering their knowledge of psychology on an independent study basis.

REAL ESTATE

005 LICENSE EXAMINATION PREPARATION 3 UNITS

(1) PREREQUISITE: Recommended Real Estate 100.

LECTURE 3 hours per week.

Review of the fundamentals, basic laws and principles of California real estate with emphasis on successful examination techniques. The course will be of assistance to those preparing for the real estate salesman's license examination.

100 REAL ESTATE PRINCIPLES 3 UNITS

(1) PREREQUISITE: None.

LECTURE 3 hours per week.

The fundamental real estate course covering the basic laws and principles of California real estate; gives understanding, background, and terminology necessary for advanced study in specialized courses. Will be of assistance to those preparing for the real estate salesman's license examination.

- 101 BASIC ESCROW PROCEDURES I 3 UNITS**
 PREREQUISITE: None.
 LECTURE 3 hours per week.
 Methods and techniques of escrow procedures for various types of business transactions, with emphasis on real estate, including the legal and ethical responsibilities of persons engaged in escrow and real estate work.
- 200 REAL ESTATE PRACTICE 3 UNITS**
 (2) PREREQUISITE: Real Estate 100 or Real Estate License.
 LECTURE 3 hours per week.
 Day-to-day operations in real estate, overview of brokerage procedures and the various roles of the employee. Mandatory prerequisite to Real Estate Broker's examination.
- 205 REAL ESTATE APPRAISAL: RESIDENTIAL 3 UNITS**
 (4) PREREQUISITE: Real Estate 100 or Real Estate License.
 LECTURE 3 hours per week.
 Purposes of appraisals, appraisal process and the different methods, approaches and techniques used to determine the value of various types of property. Mandatory prerequisite to Real Estate Broker's examination.
- 207 REAL ESTATE APPRAISAL: COMMERCIAL 3 UNITS**
 (5) PREREQUISITE: Real Estate 205.
 LECTURE 3 hours per week.
 Business property, multi-family dwellings, commercial and farm properties, depreciation determination and building costs.
- 210 REAL ESTATE FINANCE 3 UNITS**
 (7) PREREQUISITE: Real Estate 100 or Real Estate License.
 LECTURE 3 hours per week.
 Analysis of real estate financing, including lending policies and problems in financing transactions in residential, apartment, commercial and special purpose properties, emphasizing methods of financing properties. Mandatory prerequisite to Real Estate Broker's examination.
- 215 LEGAL ASPECTS OF REAL ESTATE 3 UNITS**
 (10) PREREQUISITE: Real Estate 100 or Real Estate License.
 LECTURE 3 hours per week.
 A study of California real estate law, with emphasis on its application in the real estate brokerage and related fields. Mandatory prerequisite to the Real Estate Broker's examination.
- 216 LEGAL ASPECTS OF REAL ESTATE II 3 UNITS**
 (11) PREREQUISITE: Real Estate 215.
 LECTURE 3 hours per week.
 An advanced course in California real estate law. The course is designed primarily for real estate brokers or for those planning to become brokers. A comprehensive study of applicable rules relating to changes in the law, to ownership, and to use and transfer of real property.

- 230 REAL ESTATE ECONOMICS 3 UNITS**
(14) **PREREQUISITE:** Real Estate 100 or Real Estate License and Real Estate 200.
LECTURE 3 hours per week.
Intensive study of factors which influence changes in real estate values as an aid to brokers and salesmen.

RELIGIOUS STUDIES

- 100 INTRODUCTION TO RELIGIOUS STUDIES 3 UNITS**
(1) **PREREQUISITE:** None.
LECTURE 3 hours per week.
An introductory course in religion, with an emphasis on religious experience, the origins and function of religion and man's religious mode of expression, drawing on eastern and western, ancient and modern religious phenomena to help in identifying and understanding matters of religious concern.
- 111 COMPARATIVE WORLD RELIGIONS: EAST 3 UNITS**
PREREQUISITE: None.
LECTURE 3 hours per week.
Introduction to the religions of Asia, with special attention given the origins and historical development of the Hindu, Buddhist, Confucian and Taoist traditions.
- 112 COMPARATIVE WORLD RELIGIONS: WEST 3 UNITS**
PREREQUISITE: None.
LECTURE 3 hours per week.
Introduction to the major religions of the West, with emphasis on the origins and historical development of the Judaic, Christian and Islamic traditions and of religions in Africa.
- 135 RELIGION IN AMERICA 3 UNITS**
PREREQUISITE: None.
LECTURE 3 hours per week.
Principal figures, groups, issues and trends in religion from colonial times to the present, covering such topics as the Puritans, the growth of religious liberty in America, religion and social protest, the Black religious experience, Catholic-Protestant-Jew and contemporary religious phenomena. (See History 135 or see Religious Studies 135.)
- 222 SPECIAL PROBLEMS IN RELIGIOUS STUDIES 1-2 UNITS**
PREREQUISITE: Completion of or concurrent enrollment in a course in Religious Studies.
LABORATORY 3 hours per week per unit.
Assigned readings, papers and conferences for students interested in furthering their knowledge of religious studies on an independent study basis. (May be repeated to a maximum of six units.)

RESPIRATORY THERAPY

- 101 FUNDAMENTALS OF RESPIRATORY THERAPY I 3 UNITS**
PREREQUISITE: None.
COREQUISITE: Resp 102, 104.
LECTURE 3 hours per week.
This course consists of history of Respiratory Therapy and the professional organizations; Respiratory Therapy governing bodies, regulations for medical gases, introduction to basic respiratory physiology, various treatment modalities presented.
- 102 FUNDAMENTALS OF RESPIRATORY THERAPY SKILLS LAB I 4 UNITS**
PREREQUISITE: None.
COREQUISITE: Resp 101, 104
LECTURE 2 hours and
LABORATORY 6 hours per week.
Laboratory skills for Respiratory Therapy at a basic level, including oxygen and other medical gas handling and delivery modalities, humidification application, hyper inflation therapy devices and airway management and other basic pre-clinical skills stimulations.
- 103 PHYSIOLOGIC BASIS OF RESPIRATORY DISEASE I 5 UNITS**
PREREQUISITE: Completion of Resp 101, 105, 102, 106, 104, 108, with a grade of C or better.
COREQUISITE: Resp 121, 122, 124.
LECTURE 5 hours per week.
This class presents applied cardiopulmonary, renal and neuro pathophysiology related to the diagnosis and treatment of diseases the therapist will encounter in the clinical setting. This class will use the case history approach wherever possible in an effort to assist preparation for National Board Examinations.
- 104 RESPIRATORY THERAPY CLINICAL APPLICATION I 6 UNITS**
PREREQUISITE: None.
COREQUISITE: Resp 101, 102.
LECTURE 2 hours per week and
CLINIC 16 hours per week.
Clinical application of skills learned in the lab and theory classes. The course will follow the level 1 part A of our clinical syllabus.
- 105 FUNDAMENTALS OF RESPIRATORY THERAPY II 3 UNITS**
PREREQUISITE: Completion of Resp 101, 102, 104, with a grade of C or better.
COREQUISITE: Resp 106, 108, 110.
LECTURE 3 hours per week.
Theory of compressed gases, gas laws and other physical principles; regulators and flow meters, methods of administering oxygen and other medical gases, humidification and aerosol modalities and hyper inflation equipment procedures. The basics of controlled mechanical ventilation and airway care will be presented with other critical care modalities.
- 106 FUNDAMENTALS OF RESPIRATORY THERAPY SKILLS LAB II 2 UNITS**
PREREQUISITE: Completion of Resp 101, 102, 104, with a grade of C or better.
COREQUISITE: Resp 105, 108, 110.
LECTURE 1 hour per week and

LABORATORY 3 hours per week.

Laboratory skills for completion of clinical simulation demonstrations such as blood gas medicine maintenance and operation, advanced hyper inflation therapy skills, continuous mechanical ventilation skills, and advanced critical care skills.

107 PHYSIOLOGICAL BASIS OF RESPIRATORY DISEASE II 6 UNITS

PREREQUISITE: Completion of Resp 101-106, 108, 121, 122, 124, with a grade of C or better.

COREQUISITE: Resp 110, 125, 128.

LECTURE 6 hours per week.

This class presents applied cardiopulmonary, renal and neuro pathophysiology related to the diagnosis and treatment of diseases the therapist will encounter in the clinical setting. This class will use the case history approach wherever possible in an effort to assist preparation for National Board Examinations.

108 RESPIRATORY THERAPY CLINIC APPLICATION II 6 UNITS

PREREQUISITE: Completion of Resp 101, 102, 104, with a grade of C or better.

COREQUISITE: Resp 105, 106, 110.

LECTURE 2 hours per week and

CLINIC 16 hours per week.

Clinical application of skills required in the second skills laboratory (106) and the second semester of Respiratory Therapy Theory (105). This course will follow the level 1 part B in the clinical syllabus.

110 CLINICAL APPLICATION OF RESPIRATORY THERAPY 2 UNITS

PREREQUISITE: Completion of Resp 101, 102, 104, with a grade of C or better.

COREQUISITE: Resp 105, 106, 108.

LECTURE 2 hours per week.

Clinical medicine course utilizing local physicians to present respiratory-related disease processes, using a combination of lecture and case presentation.

111 CLINICAL APPLICATION OF RESPIRATORY THERAPY 2 UNITS

PREREQUISITE: Resp 103, 121, 122, 124.

COREQUISITE: Resp 107, 125, 128.

LECTURE 2 hours per week.

This class will use a case-history approach to present advanced clinical medicine classes in respiratory-related decision processes. This clinical medicine course will utilize local physicians in the presentation, in a combination of a lecture and case presentation.

112 CARE OF THE HIGH RISK NEONATE 3 UNITS

PREREQUISITE: None.

LECTURE 3 hours per week.

This course provides specialized skill preparation for application of mechanical and electronic devices to maintain pulmonary patency of ventilation. The course will include procedure preparation and writing by the student. Medical-legal-social and psychological aspects will be covered as well as home care plans for after discharge from the N.I.C. unit.

- 115 RESPIRATORY THERAPY: SUPERVISION AND IN-SERVICE TRAINING** **1/2-2UNITS**
PREREQUISITE: None.
LECTURE 8-32 hours per semester and
LABORATORY 48-96 hours per semester.
 This course is designed to provide in-service training for Respiratory Therapists in the area of supervision of students in the clinic facilities and current topics of interest in the field of Respiratory Therapy. These topics relate to student supervision. (May be repeated to a maximum of 12 units.)
- 121 ADVANCED THEORY OF RESPIRATORY THERAPY I** **4 UNITS**
PREREQUISITE: Completion of Resp 101, 102, 104-106, 108 with a grade of C or better.
COREQUISITE: Resp 103, 122, 124.
LECTURE 4 hours per week.
 Advanced theory and procedures in the areas of oxygen administration, humidity of aerosol therapies, airway management, department organization and management, medical legal aspects of Respiratory Therapy and respiratory rehabilitation/home care.
- 122 ADVANCED RESPIRATORY THERAPY SKILLS LAB I** **4 UNITS**
PREREQUISITE: Completion of Resp 101, 102, 104-106, 108 with a grade of C or better.
COREQUISITE: Resp 103, 121, 124.
LECTURE 2 hours per week and
LABORATORY 6 hours per week.
 Advanced laboratory procedures that follow the clinical syllabus outlines for the level II parts A and B. The advanced skills include pulmonary function, neonatal and pediatric care, advanced mechanical ventilation techniques and weaning procedures, Swan-Ganz and other arterial monitoring devices, cardiopulmonary stress and metabolic measurements.
- 124 ADVANCED RESPIRATORY THERAPY CLINIC APPLICATION I** **6 UNITS**
PREREQUISITE: Completion of Resp 101, 102, 104-106, 108 with a grade of C or better.
COREQUISITE: Resp 103, 121, 122.
LECTURE 2 hours per week and
CLINIC 16 hours per week.
 Advanced clinical skills will be applied during this course and will follow our clinical syllabus, level II part A.
- 125 ADVANCED THEORY RESPIRATORY THERAPY II** **4 UNITS**
PREREQUISITE: Completion of Resp 101-106, 108, 121, 122, 124 with a grade of C or better.
COREQUISITE: Resp 107, 111, 128.
LECTURE 4 hours per week.
 Advanced theory and procedures in the areas of neonatal and pediatric care, pulmonary function application, advanced critical care management and PT assessment techniques.

128 ADVANCED RESPIRATORY THERAPY 9 UNITS

CLINIC APPLICATION II

PREREQUISITE: Completion of Resp 101-106, 108, 121, 122, 124, with a grade of C or better.

COREQUISITE: Resp 107, 111, 125.

LECTURE 3 hours per week and

CLINIC 24 hours per week.

Advanced clinical skills including pulmonary function and stress lab procedures will be covered during this course and it will follow the clinical syllabus level II, part B.

SECRETARIAL

009 SHORTHAND AND TYPEWRITING LAB 1-3 UNITS

(200) PREREQUISITE: None.

LABORATORY 3-9 hours per week.

This course of individualized instruction is designed for the student who has some skill in typing or shorthand and would like to increase his/her speed and efficiency. Assistance with equipment and materials will be given by a tutor or an instructor.

053 OFFICE EXPERIENCE 2 UNITS

(53A-C) PREREQUISITE: None.

LECTURE 8 hours per semester and

LABORATORY 6 hours per week.

Students receive on-the-job training by doing stenographic, clerical, and receptionist work for instructors. (May be taken 3 times for a maximum of 6 units.)

098 SECRETARIAL WORK EXPERIENCE 4 UNITS

(98A-D) PREREQUISITE: Concurrent enrollment in at least 7 units, including Work Experience Education.

LECTURE 1 hour per week and

WORK EXPERIENCE 15 hours per week.

This course is designed to extend the student's vocational learning opportunities through employment in the Secretarial profession, for which the student's college program has been designed. The student must be enrolled in a planned program.

100 BEGINNING TYPEWRITING 1-3 UNITS

(24) PREREQUISITE: None.

LECTURE 1-2 hours per week and

LABORATORY 3 hours per week.

Fundamentals of typewriting. Functions of machine, use of keyboard, speed and accuracy drills, rough copy, and simple tabulation. Designed to develop a minimum typing speed of 30 words a minute.

103 INTERMEDIATE TYPEWRITING 1-3 UNITS

(22) PREREQUISITE: Secretarial 100 and/or ability to type at least 30 net words a minute.

LECTURE 1-2 hours per week and

LABORATORY 3 hours per week.

Procedures for arranging and tabulating materials, the use of carbons, continued emphasis on accuracy and speed, preparation of receipts, letters, and a large volume of other diversified business forms. Designed to develop a minimum typing speed of 40 words a minute.

- 106 ADVANCED TYPEWRITING 1-3 UNITS**
 (23) PREREQUISITE: Secretarial 103 and/or ability to type at least 40 net words a minute.
 LECTURE 1-2 hours per week and
 LABORATORY 3 hours per week.
 The development of speed and accuracy to meet the most exacting requirements of business. Preparation of legal papers, financial reports, statistical material, and advanced letter production. The student should be able to type at least 50 words a minute upon the completion of this course.
- 118 ELEMENTARY SHORTHAND (GREGG) 1-6 UNITS**
 (31) PREREQUISITE: None.
 LECTURE 1-5 hours per week and
 LABORATORY 2 hours per week.
 Theory and basic principles of Gregg shorthand. A shorthand vocabulary is developed to attain a dictation speed on new material of 60 words a minute for three minutes.
- 119 INTERMEDIATE SHORTHAND 1-6 UNITS**
 (32) PREREQUISITE: Secretarial 118 with a grade of "C" or better.
 LECTURE 1-5 hours per week and
 LABORATORY 2 hours per week.
 Principles of elementary shorthand applied to the writing of sentences and letters from dictation. Intensive review of shorthand fundamentals, vocabulary building drills, reading material, transcription exercises, and phrase building. The course is developed to attain a dictation speed of 80 words a minute for three minutes.
- 132 ADVANCED DICTATION AND TRANSCRIPTION 1-6 UNITS**
 (33) PREREQUISITE: Secretarial 119 with a grade of "C" or better.
 LECTURE 1-5 hours per week and
 LABORATORY 2 hours per week.
 A course designed to develop speed and efficiency in sustained dictation and transcription. Specialized vocabularies for business, industrial, and professional fields. Review of punctuation and spelling as applied to secretarial usage.
- 135 ADVANCED SHORTHAND AND 1-2 UNITS**
 (33L) **TYPEWRITING LABORATORY**
 PREREQUISITE: Secretarial 103 and 119 with a grade of C or better.
 LABORATORY 3-6 hours per week.
 This course is designed for the student who has good shorthand and typewriting skills but would like to increase his/her speed and efficiency. (May be taken for a maximum of 4 units.)
- 138 SECRETARIAL PROCEDURES 1-6 UNITS**
 (34) PREREQUISITE: Secretarial 132 with a grade of C or better.
 LECTURE 1-5 hours per week and
 LABORATORY 2 hours per week.
 This course is designed to give in-depth training for the career-minded student. The secretarial techniques, the personal characteristics, and the knowledge required for advancement toward a professional goal are thoroughly explored.

- 140 RECORDS MANAGEMENT 1-3 UNITS**
(41) **PREREQUISITE:** None.
LECTURE 1-3 hours per week.
This course is an examination of the problems encountered in managing the records. The principles governing what records to keep, how to store them, how to find them quickly when needed, and how to apply the criteria for determining their disposition or retention are thoroughly explored. The rules for indexing and finding materials by the following methods are thoroughly explored: alphabetic, geographic, numeric and subject. Simulated office correspondence is used to reinforce the student's understanding of these rules.
- 141 OFFICE TRAINING 1-6 UNITS**
(42) **PREREQUISITE:** Ability to type at least 40 words a minute for five minutes.
LECTURE 1-5 hours per week and
LABORATORY 2 hours per week.
Knowledge and experience in office procedures and secretarial skills necessary for success in a modern office. Emphasis is on instruction and experience in the use of the dictaphone, electric typewriter, ditto and mimeograph machines, and calculating machines.
- 145 HUMAN RELATIONS IN THE OFFICE ENVIRONMENT 3 UNITS**
PREREQUISITE: None.
LECTURE 3 hours/per week.
This course is an examination of the human relations problems encountered in the business office, especially those concerning the new employee, in dealings with employers, with peers, and with the general public.
- 155 LEGAL OFFICE PROCEDURES 1-3 UNITS**
(43) **PREREQUISITE:** Secretarial 100.
LECTURE 1-3 hours per week.
Specialized training for the legal office assistant. Legal terminology, legal correspondence, professional relations with employers and clients, California Codes and court rules, and preparation and handling of legal forms.
- 165 MEDICAL OFFICE PROCEDURES 1-3 UNITS**
(44) **PREREQUISITE:** Secretarial 100.
LECTURE 1-3 hours per week.
Specialized training for the medical office assistant. A realistic study is made through the use of simulation techniques of medical office activities. These include: handling appointments and correspondence; interpreting, preparing, and maintaining medical office and hospital records; personal conduct, ethics, and public relations.

168 MEDICAL TERMINOLOGY AND TRANSCRIPTION I 1-6 UNITS

PREREQUISITE: Secretarial 100.

LECTURE 1-6 hours per week and

LABORATORY 1 hour per week.

This is a course covering medical terminology as it relates to transcription of medical records in all phases including history and physical examination reports, radiology reports, operation reports, pathology reports including autopsies and discharge summary reports. The course includes transcription of these reports, taking each type of report separately; e.g. history and physical examination first, radiology second, etc.

169 MEDICAL TERMINOLOGY AND TRANSCRIPTION II 1-6 UNITS

PREREQUISITE: Sec. 168.

LECTURE 1-5 hours per week and

LABORATORY 1-2 hours per week.

This is a course covering medical terminology as it relates to transcription of medical records in all phases including all the specialities in the medical field, with particular emphasis on laboratory data, surgery terminology and pharmaceuticals. Time is spent in documenting new terminology and more than half the time will be spent in what closely resembles "on-the-job" training.

SOCIOLOGY

001 THE EVOLUTION OF WOMEN'S LIBERATION 3 UNITS

(101) PREREQUISITE: None.

LECTURE 3 hours per week.

A historical exploration of the development of the Women's Liberation Movement from Biblical times to the present with explorations of the contemporary issues and current exponents of the movement.

095-096 FIELD WORK 2 UNITS

097 LECTURE 1 hour per week and

(51-53) FIELD WORK 5 hours per week.

Open to any student wishing to familiarize himself with the aims and operations of selected community agencies and projects organized to meet people's needs and social problems. Selected concepts in social welfare, through lecture-discussions and weekly observation in the field.

099 DIRECTED FIELD PRACTICE 3 UNITS

(98) PREREQUISITE: None.

LECTURE 1 hour per week and

FIELD WORK 10 hours per week.

100 INTRODUCTION TO SOCIOLOGY 3 UNITS

(1) PREREQUISITE: None.

LECTURE 3 hours per week.

The course entails the careful examination of man's social life built around the concepts of structure, function, pattern and process. Principles, concepts, theories of culture, social organization, social roles and stratification, social change and social planning are studied in this course.

105 SOCIAL PROBLEMS 3 UNITS

(2) PREREQUISITE: None.

LECTURE 3 hours per week and planned field trips.

Study of vital current problems in American society such as alcoholism, crime, divorce, ethnic and minority relations, population, and poverty—their probable causes, tangible effects on the social order, and possible treatment.

131 INTERPERSONAL RELATIONSHIPS IN SOCIETY 3 UNITS

(36) PREREQUISITE: None.

LECTURE 3 hours per week.

A functional study of relationships (personal, marital, familial) designed to help the student understand the meaning and dynamics of interpersonal relationships as they relate to dating, courtship, preparation for marriage and the adjustments of marriage and family living. (Formerly Marriage and the Family.)

141 ETHNIC RELATIONS 3 UNITS

(8) PREREQUISITE: None.

LECTURE 3 hours per week.

The study of racial, ethnic, and religious groups in American society, with an emphasis on the problems of prejudice and acceptance in a multi-group society.

170 INTRODUCTION TO SOCIAL SERVICE 3 UNITS

(30) PREREQUISITE: Sociology 100 or concurrent enrollment.

LECTURE 3 hours per week.

The history, philosophy, and development of thought in social welfare, public services, casework, social group work, community public services organizations, and their functions and orientations.

172 COMMUNITY RESOURCES 3 UNITS

(31) PREREQUISITE: None.

LECTURE 3 hours per week.

A survey of the field of social service agencies in the local area; their functions and services. Guest speakers from the social service agencies will present information on their agencies. Course will offer field trips to agencies.

239•240 LEADERSHIP METHODS 3 UNITS

(39A-B) PREREQUISITE: None.

LECTURE 3 hours per week.

Principles and practices for effective work in groups, group processes, and group leadership. Intended primarily for Associated Student Body officers and aides to the Student Council.

SPANISH

010 SPANISH FOR TRAVELERS 3 UNITS

(110) PREREQUISITE: None.

LECTURE 3 hours per week.

A course designed to acquaint the traveler departing to a Spanish speaking country (Spain, Mexico, Latin America, etc.) with the essential Spanish phraseology, thereby enabling him to adapt to typical conversational situations which he will encounter.

- 130 SPANISH FOR PUBLIC EMPLOYEES 3 UNITS**
 (103A-6) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A course designed to meet the specific needs of public (city, county, federal) employees, who desire a speaking knowledge of Spanish in order to communicate with their Spanish speaking clientele. It is especially recommended for nurses, social workers, policemen, firemen, and other public employees.
- 150 SPOKEN SPANISH 2½ UNITS**
 (8A) PREREQUISITE: None.
 LECTURE 2½ hours per week and
 LABORATORY ½ hour per week.
 Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
- 151 SPOKEN SPANISH 2½ UNITS**
 PREREQUISITE: Spanish 150.
 LECTURE 2½ hours per week and
 LABORATORY ½ hour per week.
 A continuation of Spanish 150. Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
 Spanish 150-151 is equivalent to Spanish 155.
- 155 ELEMENTARY SPANISH I 5 UNITS**
 (1) PREREQUISITE: None.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
- 160 SPOKEN SPANISH 2½ UNITS**
 (8C) PREREQUISITE: Spanish 151, or Spanish 155, or two years of high school Spanish.
 LECTURE 2½ hours per week and
 LABORATORY ½ hour per week.
 A continuation of Spanish 151. Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
- 161 SPOKEN SPANISH 2½UNITS**
 (8D) PREREQUISITE: Spanish 160.
 LECTURE 2½ hours per week and
 LABORATORY ½ hour per week.
 A continuation of Spanish 160. Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.
 Spanish 160-161 is equivalent to Spanish 165.
- 165 ELEMENTARY SPANISH II 5 UNITS**
 (2) PREREQUISITE: Spanish 155 or Spanish 150 and 151, or two years of high school Spanish.
 LECTURE 5 hours per week and
 LABORATORY 1 hour per week.
 A continuation of Spanish 155.

- 175 INTERMEDIATE SPANISH I 4 UNITS**
 (3) PREREQUISITE: Spanish 165, or Spanish 160 and 161, or three years of high school Spanish.
 LECTURE 4 hours per week and
 LABORATORY 1 hour per week.
 Composition and conversation, including a review of grammar, plus extensive and intensive reading of practical as well as literary Spanish.
- 185 INTERMEDIATE SPANISH II 4 UNITS**
 (4) PREREQUISITE: Spanish 175 or four years of high school Spanish.
 LECTURE 4 hours per week and
 LABORATORY 1 hour per week.
 A continuation of Spanish 175.
- 210 ADVANCED SPANISH CONVERSATION 2 UNITS**
 (10A) PREREQUISITE: Spanish 165, or Spanish 160, and 161, or three years of high school Spanish.
 LECTURE 2 hours per week.
 Practical conversation and vocabulary building on everyday life and customs of the people who speak Spanish. Classroom work entirely in Spanish, supplemented by recordings and talks by native speakers.
- 225 SPANISH GRAMMAR AND COMPOSITION 2 UNITS**
 PREREQUISITE: Spanish 185.
 LECTURE 2 hours per week.
 An intensive review of the major concepts of Spanish grammar, with considerable practice in usage, composition, and idiomatic application of these principles.
- 235 DIRECTED READING IN SPANISH 2 UNITS**
 (35A) PREREQUISITE: Spanish 185.
 LECTURE 2 hours per week.
 Independent reading and research under the supervision of the instructor, with conferences and oral and written reports.
- 236 DIRECTED READING IN SPANISH 2 UNITS**
 (35B) PREREQUISITE: Spanish 185.
 LECTURE 2 hours per week.
 Independent reading and research under the supervision of the instructor, with conferences and oral and written reports.
- 242 SPANISH CULTURE AND CIVILIZATION 3 UNITS**
 (42) PREREQUISITE: None.
 LECTURE 3 hours per week.
 A course introducing the student to the major trends and characteristics of Spanish culture and civilization as reflected through the centuries in literature, art, and history. The class is conducted in English.

- 244 LATIN AMERICAN CULTURE AND CIVILIZATION 3 UNITS**
(44) PREREQUISITE: None.
LECTURE 3 hours per week.
A course introducing the student to the major trends and characteristics of Latin-American culture and civilization, as reflected through the centuries in literature, art, and history. The class is conducted in English.

SPEECH

- 010 ORAL COMMUNICATION 3 UNITS**
(62) PREREQUISITE: None.
LECTURE 3 hours per week.
Speech activities with the emphasis on the development of skill in accurate communication of ideas through conversation, short speeches, listening training and analysis of recorded speaking exercises. Speech practice is focused on practical, assertive and interpersonal speech skills.
- 103 ELEMENTS OF PUBLIC SPEAKING 3 UNITS**
(1A) PREREQUISITE: None.
LECTURE 3 hours per week.
Training in the methods of developing confidence and poise and methods of organizing material for presentation before an audience. Giving various types of speeches will help the student develop skill in speech delivery techniques. The emphasis is on the effective organization and communication of ideas. Student speeches are presented to small groups most of the semester.
- 105 ADVANCED PUBLIC SPEAKING 3 UNITS**
(1B) PREREQUISITE: Speech 103.
LECTURE 3 hours per week.
Practice in various forms of public speaking with emphasis on audience analysis and analysis of understanding famous speeches.
- 120 ORAL INTERPRETATION OF LITERATURE 3 UNITS**
(11A) PREREQUISITE: None.
LECTURE 3 hours per week.
Training in the analysis of literature for oral interpretive reading with practice on the presentation of materials to an audience; drill on minor voice problems.
- 121 ADVANCED ORAL INTERPRETATION 3 UNITS**
(11B) **OF LITERATURE**
PREREQUISITE: Speech 120.
LECTURE 3 hours per week.
Stresses the history theory and practice of the art of oral reading. Preparation and presentation of four lecture-recital programs suitable for performing for various civic groups.
- 141 GROUP DISCUSSION 3 UNITS**
(4A-B) PREREQUISITE: None.
LECTURE 3 hours per week.
Training in basic principles and techniques of discussion. Participation in panel discussions, problem-solving committees and

symposiums develop skill in agenda preparation, skillful group leadership and individual speaking. Efficiency and meaningful communication, as they apply to business and community group action, are stressed.

142 ADVANCED GROUP DISCUSSION 3 UNITS

PREREQUISITE: Speech 141.

LECTURE 3 hours per week.

Advanced training in basic principles and techniques of discussion. Participation in panel discussions, problem-solving committees and symposiums develop skill in agenda preparation, skillful group leadership and individual speaking. Efficiency and meaningful communications as it applies to business and community group action is stressed.

160-161 ARGUMENTATION AND DEBATE 3 UNITS

(3A-B) PREREQUISITE: Speech 103-105. Courses need not be taken in sequence.

LECTURE 3 hours per week.

Combines theory about the nature of reasoning with practice in debating current issues of significance. Emphasizes functions of the persuader and uses of evidence.

SUPERVISION

010 ELEMENTS OF SUPERVISION 3 UNITS

(101) PREREQUISITE: None.

LECTURE 3 hours per week.

A basic introductory course covering in general terms the total responsibilities of a supervisor in industry, such as organization, duties and responsibilities, human relations, grievances, training, rating, promotion, quality-quantity control, management-employee relations, etc.

012 BASIC PSYCHOLOGY FOR SUPERVISORS 3 UNITS

(102) PREREQUISITE: None.

LECTURE 3 hours per week.

Course to assist the supervisor in understanding the people with whom he works, with emphasis on the psychological aspects, perceptions, learning processes, emotions, attitudes, and personalities.

013 HUMAN RELATIONS 3 UNITS

(103) PREREQUISITE: None.

LECTURE 3 hours per week.

A course designed to show the practical application of basic psychology in building better employer-employee relationships by studying human relations techniques.

014 COMMUNICATION FOR SUPERVISORS 3 UNITS

PREREQUISITE: None.

LECTURE 3 hours per week.

A survey course in supervisory communications in the modern organizational environment. Interpersonal communication theory

and practice; including both oral and written communications in individual and group settings, report development and writing, and letter and resume development and writing will be covered.

- 015 ORGANIZATION AND MANAGEMENT 3 UNITS**
(105) **PREREQUISITE:** Supervision 010.
LECTURE 3 hours per week.
The supervisor's role as planner, organizer, director, controller and coordinator with instruction in the basic functions of an organization.

THEATRE ARTS

- 100 INTRODUCTION TO THEATRE 3 UNITS**
(10) **PREREQUISITE:** None.
LECTURE 3 hours per week.
Introduces the student to the fundamental theories of the theatre arts, develops a discriminating appreciation of theatre production, the cinema and television. It provides a basic background for the area of theatre.

- 104 CREATIVE DRAMATICS 2 UNITS**
(12) **PREREQUISITE:** None.
LECTURE 1 hour per week and
LABORATORY 2 hours per week.
A class to provide the elementary school teacher, the nursery school teacher, parents or any individual having contact with children, with the theory and practice of improvisational drama, dramatization of children's stories, and techniques of storytelling, with emphasis on participation, leadership, and development of original materials for classroom and recreational use.

- 108•109 MUSICAL THEATRE 3 UNITS**
(14A-B) **PREREQUISITE:** None.
LECTURE 3 hours per week.
A survey course on the masterworks of the theatre. The first semester covers dramas from the classical Greek period to the neo-classical period. The second semester covers drama from the Restoration to the present.

- 116 REPERTORY THEATRE 3 UNITS**
PREREQUISITE: By audition or interview per summer. Offered for outstanding students in performing arts.
LECTURE 5 hours per week and
LABORATORY 2 hours per week.
This eight-week summer saturation course is an honors program offering for the superior career-oriented student performer. It differs from the regularly scheduled performance laboratory program in degree of professionalism, in the quality of individual instruction, and in the intensity of the work required. (May be taken for a total of 12 units.)

- 120 ACTING FUNDAMENTALS 3 UNITS**
 (2A) PREREQUISITE: None.
 LECTURE 3 hours per week.
 An introduction to the Stanislavski theory of acting which makes practical application of theory in solo and ensemble scenes in the major areas of dramatic literature.
- 130 MODERN JAZZ DANCE I 2 UNITS**
 (30A-D) PREREQUISITE: None.
 (131-133) LECTURE 1 hour per week and
 LABORATORY 2 hours per week.
 Beginning study of the principles of Jazz and Theatrical Dance techniques. Course emphasis includes body placement, principles of kinesiology and motor learning. (May be taken for a maximum of 8 units.)
- 144 THEATRE WORKSHOP 3 UNITS**
 (40A-C) PREREQUISITE: None.
 (146) LECTURE 3 hours per week and
 LABORATORY 6 hours per week. (8 weeks)
 Practice in the interpretation of varied roles in dramatic literature, plotting of action on stage, designing of costumes and settings for plays, and the use of make-up. (May be taken for a maximum of 12 units.)
- 145 ADVANCED THEATRE WORKSHOP 3 UNITS**
 (140A-D) PREREQUISITE: Thart 144.
 (146) LECTURE 3 hours per week and
 LABORATORY 6 hours per week. (8 weeks)
 Advanced practice in the development of a professionally mounted production, the interpretation of varied roles in dramatic literature, designing of costumes and settings for plays. (May be taken for a total of 12 units.)
- 155 SUMMER THEATRE WORKSHOP 4 UNITS**
 (150A-D) PREREQUISITE: None.
 (156-158) LABORATORY 15 hours per week. (8 weeks)
 Instruction in the areas of stage production, acting, promotion, and publicity. Designed as theatrical experience for high school graduates and college freshmen. (May be taken for a total of 12 units.)
- 175 STAGE MAKE-UP 1 UNIT**
 (11) PREREQUISITE: None.
 LECTURE 3 hours per week.
 An introduction to the theories of make-up through changing the appearance of the actor to correspond with an interpretation of characters.
- 176•177 FUNDAMENTALS OF STAGECRAFT 2 UNITS**
178•179 PREREQUISITE: None.
 (28A-D) LABORATORY 4 hours per week.
 Basic theories and practice of construction. painting, assembly, shifting and lighting of stage scenery and properties.

- 180 BALLET I 2 UNITS**
 (32A-D) PREREQUISITE: None.
 (181-183) LECTURE 1 hour per week and
 LABORATORY 2 hours per week.
 Beginning techniques of classical ballet consisting of basic barre and center work; basic body and arm positions, port de bras, allegro and elementary adagio. Development of a working knowledge of ballet terminology. (May be taken for a total of 8 units.)
- 222•223 ADVANCED ACTING 3 UNITS**
 (3A-B) PREREQUISITE: Theatre Arts 120.
 LECTURE 3 hours per week.
 Theory and practice of characterization in solo and ensemble scenes.
- 231 MODERN JAZZ DANCE II 2 UNITS**
 (31A-D) PREREQUISITE: Thart 130.
 (232-234) LECTURE 1 hour per week and
 LABORATORY 1 hour per week.
 Intermediate study of the principles of Jazz and Theatrical Dance techniques. Course emphasis includes body placement, principles of kinesiology and motor learning, student choreography and performance. (May be taken for a total of 8 units.)

WELDING TECHNOLOGY

- 013 BASIC OXY-ACETYLENE WELDING 1-6 UNITS**
 (59) PREREQUISITE: None.
 (65A) LECTURE 1-3 hours per week and
 (159A-B) LABORATORY 3-9 hours per week.
 A basic course in the fundamentals of Oxy-Acetylene Welding. Special emphasis on set-up of equipment and safety in its use. Flame cutting by hand and machine, brazing, silver brazing. Special techniques in 3-position welding, welding symbols, and basic metallurgy will be included.
- 017 BASIC DC ARC WELDING 1-6 UNITS**
 (60) PREREQUISITE: None.
 (65B) LECTURE 1-3 hours per week and
 (160A-B) LABORATORY 3-9 hours per week.
 A course in basic fundamentals of DC Arc Welding, emphasizing set-up of equipment, safe shop practices, electrode choice, welding symbols, basic metallurgy and methods of testing. Instruction also includes basic weld types in positions.
- 020 ADVANCED DC ARC WELDING 1-6 UNITS**
 (62) PREREQUISITE: Welding Technology 017.
 (162A-B) LECTURE 1-3 hours per week and
 LABORATORY 3-9 hours per week.
 An advanced course in DC arc welding designed for students who are interested in a career as a certified welder. Students receive practical training for certification and entry into the welding industries.

- 031 T-I-G- WELDING (TUNGSTEN INERT GAS) ½-2 UNITS**
 (63A-B) PREREQUISITE: Welding Technology 013
 LECTURE ½-1 hour per week and
 LABORATORY 3 hours per week.
 Practical training in theory, set-up of equipment, safety and operation of T-I-G welding machines. Thorough instruction in the usage of the various inert gases used in the welding of both ferrous and non-ferrous metals.
- 034 M-I-G- WELDING (METAL INERT GAS) ½-2 UNITS**
 (64A-B) PREREQUISITE: Welding Technology 017.
 LECTURE ½-1 hour per week and
 LABORATORY 3 hours per week.
 Practical training in theory, the set-up of equipment, safety and operation of M-I-G machines. Thorough instruction in the usage and required pressures of the various inert gases used. Intensified practical instruction and demonstration on ferrous metals.
- 040 LABORATORY PRACTICUM 1-2 UNITS**
 PREREQUISITE: Completion of or concurrent enrollment in a welding course.
 LABORATORY 3-6 hours per week.
 Provides additional laboratory practice in basic oxy-acetylene, basic and advanced DC arc, T-I-G, M-I-G, and metal sculpture welding. (May be repeated for a maximum of 4 units.)
- 098 WELDING TECHNOLOGY WORK EXPERIENCE 4 UNITS**
 (98A-D) PREREQUISITE: Concurrent enrollment in at least 7 units including Work Experience Education.
 LECTURE 1 hour per week and
 WORK EXPERIENCE 15 hours per week.
 The course is designed to extend the student's vocational learning opportunities through employment in the Welding profession for which the student's college program has been designed. The student must be enrolled in a planned program.

SECTION III

CURRICULAR OUTLINES (MAJORS)

ACCOUNTING
ADMINISTRATION OF JUSTICE
AGRICULTURE
ANTHROPOLOGY
ART
ASTRONOMY
AUTO BODY TECHNOLOGY
AUTOMOTIVE TECHNOLOGY
BIOLOGY
BOTANY
BUSINESS ADMINISTRATION
BUSINESS MANAGEMENT
CHEMISTRY
CLERICAL
ECONOMICS
ENGLISH
FISHERIES AND
WILDLIFE MANAGEMENT
FOREIGN LANGUAGE
GEOGRAPHY
GEOLOGY
HISTORY
LIBERAL ARTS
MARKETING
MATHEMATICS
MEDICAL LABORATORY
TECHNICIAN
MICROBIOLOGY

MUSIC
OPTICIANRY
PHILOSOPHY
PHOTOGRAPHY
PHYSICS
POLITICAL SCIENCE
PRE-DENTAL HYGIENE
PRE-DENTISTRY
PRE-EDUCATION
PRE-ENGINEERING
PRE-FORESTRY
PRE-LEGAL
PRE-MEDICAL RECORD
ADMINISTRATION
PRE-MEDICINE
PRE-NURSING
PRE-OPTOMETRY
PRE-PHARMACY
PRE-PHYSICAL THERAPY
PRE-VETERINARY MEDICINE
PSYCHOLOGY
REAL ESTATE
RELIGIOUS STUDIES
RESPIRATORY THERAPY
SECRETARIAL
SOCIOLOGY
SPEECH AND THEATRE ARTS
WELDING
ZOOLOGY

CURRICULAR OUTLINES (MAJORS)

Crafton Hills College has designed its curricular offerings to provide training in occupational, vocational, and professional areas. The successful completion of authorized programs may lead to:

1. A Certificate of Achievement in a specific field.
2. An Associate in Arts or Associate in Science Degree.
3. Completion of the lower division requirements for transfer to upper division standing at a four-year college.

It is possible to expand the "Certificate of Achievement" programs to include the Associate Degree with additional course work. Students transferring to a four-year institution would be wise to meet the Associate Degree requirements at Crafton Hills College while completing lower division requirements for the institution of transfer.

All of the transfer program suggestions in this section will meet the Crafton Hills College Associate Degree requirements as well as the general education and lower division requirements at most of the four-year State institutions. The catalog of the institution to which one intends to transfer should be consulted to determine if adjustments in specific course patterns are required.

The majors that follow suggest programs which fulfill various objectives. The courses listed are suggested; often there are other courses which may be substituted. Advisers or counselors should be consulted when there is doubt or conflict.

Supporting Courses for all Curricular Outlines should be chosen only after consultation by each student with his adviser.

General Studies Requirements

The Graduation Requirements as stated in the front of the catalog must be completed for graduation from Crafton Hills College.

Transfer students should pay careful attention to the General Education patterns as outlined in Section V of this catalog.

ACCOUNTING

Accountants compile and analyze business records and prepare financial reports such as profit and loss statements, balance sheets, cost studies, and tax reports. Accountants may specialize in such areas as auditing, tax work, cost accounting, profit and control, or systems, and procedures.

Recommended Courses:

Accounting 210-220 (3) (3)	Computer Inform. Sciences 104 (3)
Accounting 211-221 (1) (1)	Mathematics 108 (4)
Business Adm. 100 (3)	Economics 204-205 (3) (3)
Business Adm. 217 (3)	

(See Pages 24-26, and Section V)

ADMINISTRATION OF JUSTICE

The Administration of Justice curriculum is designed to serve a threefold purpose: 1. to provide pre-employment training for those wishing to train for police work; 2. to provide in-service training for the employed officer; 3. to offer a transfer program for those desiring to go on to a four-year college for the Bachelor's Degree. Students planning to continue their education to include the Bachelor's Degree can complete all of the requirements for junior standing in any of the colleges offering degrees in Administration of Justice by proper selection of electives and consulting the catalog of their chosen college. Since the personal qualifications for employment vary to some degree from agency to agency, students are urged to inquire into qualifications from the agency of their choice.

The California Commission on Peace Officer Standards and Training and most police agencies require investigation into the candidate's background regarding character, morality, dependability and mental conditions which would in any manner interfere with the normal discharge of legal duties.

Required Courses:

Administration of Justice 101 (3) Administration of Justice 104 (3)
Administration of Justice 102 (3) Administration of Justice 105 (3)
Administration of Justice 103 (3)

(See Pages 24-26, and Section V)

AGRICULTURE

(See Counseling Office)

ANTHROPOLOGY

Recommended Courses:

Anthropology 100-102-106 Biology 120 (4)
(3) (3) (3) Geology 100-112 (4) (4)
Anthropology 222-223-224 (1-3)

(See Pages 24-26, and Section V)

ART

Students with a major interest in the field of art should plan a curriculum which will give them a broad cultural background. Such a curriculum is especially necessary for students who wish to prepare for university entrance.

Recommended Courses:

Art 100-102 (3) (3) Art 117-118 (3) (3)
Art 115-116 (3) (3) Art 166-167 (3) (3)

(See Pages 24-26, and Section V)

ASTRONOMY

Recommended Courses:

Astronomy 150 (3) Mathematics 153-154 (4) (4)
Astronomy 160 (1) Mathematics 253-254 (4) (4)
Foreign Language 155-165 (5) (5) Physics 200-201-202 (4) (4) (4)
*Foreign Language 150-151 is equivalent to Foreign Language 155
Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

AUTO BODY TECHNOLOGY

Automotive body repairmen are skilled craftsmen who repair damaged motor vehicles by straightening bent frames, removing dents from fenders and body panels, welding torn metal, and replacing badly damaged parts. This program also includes the techniques involved in the removal and replacement of upholstery and glass, and the skills necessary for automobile painting.

Recommended Courses:

Auto Body Tech. 010, 018 (8) (8)	Mathematics 051 (3)
English 100 or English 015 or	Welding Tech. 013 (2)
English 011 (3)	Welding Tech. 017 (2)

(See Pages 24-26, and Section V)

AUTOMOTIVE TECHNOLOGY

Recommended Courses:

Automotive Tech. 030-031 (5) (4)	Mathematics 051 (3)
Automotive Tech. 042 (4)	Welding Tech. 013-017 (2) (2)
English 100 or 015 (3)	

(See Pages 24-26, and Section V)

BIOLOGY

Courses are offered in the Biological Sciences which enable the student to meet pre-major requirements in the fields of biology and in the professions which demand a background in the biological sciences. By proper selection of courses, pre-major requirements may be met for the following majors: Biology, Botany, Dentistry, Forestry, Laboratory Technology, Medicine, and Zoology. In all cases, the student should consult the catalog or bulletin of the professional school or senior college in which he expects to complete his major.

Recommended high school preparation for professional Biology majors:

- Algebra - 2 years
- Chemistry - 1 year
- Foreign Language, preferably German, or French - 2 years
- Physics - 1 year
- Plane Geometry - 1 year
- Solid Geometry or equivalent - $\frac{1}{2}$ year
- Trigonometry - $\frac{1}{2}$ year
- College entrance requirements in English and U.S. History

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 214-215 (4) (4)
Biology 201 (4)	Mathematics 153 (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

BOTANY

Recommended Courses:

Biology 130-131 (5) (5)	Mathematics 153 (4)
Chemistry 160-161 (5) (5)	

(See Pages 24-26, and Section V)

THE PROFESSIONAL SECRETARY - Crafton Hills College offers secretarial and office training at all skill levels. Special typing, shorthand and accounting laboratories are provided for both day and evening students wishing to enter the field as well as to advance their careers through specialized training.

GETTING IT TOGETHER - Welding is a necessary part of a variety of crafts as well as a well-paying trade of its own. Crafton Hills College offers beginning through advanced instruction in all phases of gas, arc and heliarc welding.

BUSINESS ADMINISTRATION

Top administrators set organization goals, coordinate organization activities, and make the major decisions which establish organization-wide policies. The size of the organization determines whether the top administration will also carry through with plans to develop and take direct charge of the work done in connection with policies.

Recommended Courses:

Accounting 210-220 (3) (3)	Business Adm. 217 (3)
Accounting 211-221 (1) (1)	Economics 204-205 (3) (3)
Business Adm. 100 (3)	Mathematics 108 (4)
	Marketing 101 (3)

(See Pages 24-26, and Section V)

BUSINESS MANAGEMENT

Beginners in the business management field normally gain experience through a management training program or as assistants to people in management positions. They may be responsible for work done in connection with store displays, financial reports, employee-recreational activities or similar types of projects.

Recommended Courses:

Accounting 205 (3)	Economics 100 (3)
Business Adm. 101 (3)	Consumer Ed. 010 (3)
Business Adm. 217 (3)	Marketing 101 (3)
Business Adm. 115 (3)	Secretarial 100 (3)
Business Adm. 052 (3)	

(See Pages 24-26, and Section V)

CHEMISTRY

Recommended Courses:

Chemistry 160-161 (5) (5)	Mathematics 253-254 (4) (4)
Chemistry 214-215 (4) (4)	Physics 110-111 (4) (4)
Mathematics 153-154 (4) (4)	

(See Pages 24-26, and Section V)

CLERICAL

Training in the clerical field may enable the student to begin employment as clerk-typist, office-machine operator, shipping and receiving clerk, receptionist, or other types of positions which require proficiency in the basic secretarial skills.

Recommended Courses:

Accounting 205 (3)	Secretarial 103 (3)
Business Adm. 101 (3)	Secretarial 106 (3)
Business Adm. 052 (3)	Secretarial 140 (3)
English 010 (3)	Secretarial 141 (6)
Secretarial 100 (3)	Secretarial 053-054-055 (1) (1) (1)

(See Pages 24-26, and Section V)

ECONOMICS

Recommended Courses:

Accounting 210-220 (3) (3)	Computer Infor. Sciences 104 (3)
Accounting 211-221 (1) (1)	Mathematics 108 (4)
Business Adm. 217 (3)	Economics 204-205 (3) (3)

(See Pages 24-26, and Section V)

ENGLISH

The English Division includes courses of study in English language and literature. Students planning majors in this department are advised that four-year colleges and universities require a "C" average and often higher in the courses taken during the freshman and sophomore years of college work. Desirable basic high school preparation includes algebra and plane geometry; chemistry, physics, or biology with laboratory; at least two years of one foreign language, preferably Latin, French or German; and four years of English.

Recommended Courses:

English 100-152 (3) (3)	Foreign Language 155-165 (5) (5)*
English 262-263 (3) (3)	Foreign Language 175-185 (4) (4)
English 272-273 (3) (3)	

*Foreign Language 150-151 is equivalent to Foreign Language 155

Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

FISHERIES AND WILDLIFE MANAGEMENT

Recommended Courses:

Biology 130-131 (5) (5)	Mathematics 105 (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

FOREIGN LANGUAGE

Students who intend to major in a foreign language should consult the catalog of the college at which they expect to complete their major. The suggested pattern should be considered as a general guide.

Recommended Courses:

English 100-152 (3) (3)	Foreign Language 225 (2) or
Foreign Language *155-165-175-185 (5) (5) (4) (4)	Foreign Language 235-236 (2) (2)
	Second Language 155-165 (5) (5)

*Foreign Language 150-151 is equivalent to Foreign Language 155

Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

GEOGRAPHY

The field of geography offers wide employment opportunities in teaching, government, urban and regional planning, research, and various private agencies and foundations. It is strongly recommended as a field emphasis for individuals seeking the broad and varied background required for elementary teaching.

Recommended Courses:

Geography 110-111 (3) (1)	Geography 114 (3)
Geography 102 (3)	Geography 104 (3)

(See Pages 24-26, and Section V)

GEOLOGY

Recommended Courses:

Chemistry 160-161 (5) (5)	Mathematics 153-154 (4) (4)
Geology 100-112 (4) (4)	Physics 110-111 (4) (4)
Geology 226-227-228-229	

(1) (1) (1) (1)

(See Pages 24-26, and Section V)

HISTORY

Designed to meet graduation requirements for Crafton Hills College and junior standing at most institutions for higher learning, including the University of California. Consult the catalog for the school you are planning to attend. Some variations and substitutions are possible.

Recommended Courses:

Economics 100 (3)	History 137 (3)
Geography 110 (3)	Philosophy 101 (3)
History 160-161 (3) (3)	Political Science 100 (3)
History 100-101 (3) (3)	

(See Pages 24-26, and Section V)

LIBERAL ARTS

This general education curriculum is suggested for students who have not selected a particular major field. This major is planned to complete general education requirements at many four-year colleges and also fulfills graduation requirements for the Associate degree.

Recommended Courses:

Basic Subjects (6)	Social Science (9)
Humanities (9)	Transfer Electives (9)
Natural Science (9)	

(See Pages 24-26, and Section V)

MARKETING

This program is top management oriented and deals with the administrative areas of marketing research, product distribution, advertising, and sales. The suggested curriculum presented below prepares the student to transfer to a four-year college.

Recommended Courses:

Accounting 210-220 (3) (3)	Economics 204-205 (3) (3)
Accounting 211-221 (1) (1)	Marketing 101 (3)
Business Admin. 101 (3)	Marketing 105 (3)
Business Admin. 217 (3)	Marketing 110 (3)

(See Pages 24-26, and Section V)

MATHEMATICS

Recommended Courses:

Foreign Language *155-165-175 (5) (5) (4)	Mathematics 253-254 (4) (4)
Mathematics 153-154 (4) (4)	Physics 110-111 (4) (4)

*Should be French or German

*Foreign Language 150-151 is equivalent to Foreign Language 155

Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

MEDICAL LABORATORY TECHNICIAN

Recommended Courses:

Biology 130-131 (5) (5)	Mathematics 153 (4)
Chemistry 160-161 (5) (5)	Microbiology 203 (5)
Chemistry 214-215 (4) (4)	

(See Pages 24-26, and Section V)

MICROBIOLOGY

Recommended Courses:

Biology 130-131 (5) (5)	Mathematics 153 (4)
Chemistry 160-161 (5) (5)	Microbiology 203 (5)
Chemistry 214-215 (4) (4)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

MUSIC

The music major will pursue the following course of study at Crafton Hills College. The usual group of theory courses is contained in the Comprehensive Musicianship courses 101-102-201-202. Proficiency in piano is essential to the level of performance of four-part hymns or two-part Bach Inventions to enter a four-year program at the junior level. Continuous enrollment in a performance group is required. At least three semesters of French, German, or Italian is recommended. Check the catalog of the school to which you intend to transfer for specific requirements.

Recommended Courses:

Music 101-102 (5) (5)
Music 201-202 (5) (5)
Music 124-125 (3) (3) (Recommended for the second year of study)
Class Piano (2) (2) (May be waived in pari or in whole by examination)
Music 130 (2) (May be waived in pari or in whole by examination)
Performance Group (2) (2) (2) (2)

(See Pages 24-26, and Section V)

OPTICIANRY

Today, sixty percent of the American population wear some sort of vision correcting eyewear. To meet the need for competent personnel to produce this eyewear, this College offers a comprehensive program in Opticianry.

An Optician combines scientific and clinical procedures to fit and adapt lenses or devices to aid or correct visual deficiencies. In carrying out this role, the ophthalmic dispenser plays a vital part in today's health care field.

Employment possibilities are excellent. A graduate of the program will be qualified to seek a position as an optician, a contact lens fitter, an ophthalmic assistant, an ophthalmic sales representative, or an optical research technician.

Recommended Courses:

FIRST SEMESTER

Psychology 025 (3)
Math 051 (3)
Opticianry 010 (3)
Opticianry 012 (4)
Opticianry 016 (3)
Opticianry 018 (2)
Opticianry 022 (3)
Humanities (3)

SECOND SEMESTER

Physics 101 (4)
Opticianry 014 (4)
Opticianry 020 (2)
Opticianry 024 (5)
Opticianry 032 (3)
General Education

THIRD SEMESTER

Opticianry 026 (5)
Opticianry 028 (4)
Opticianry 034 (4)
Opticianry 098 (4)
General Education

FOURTH SEMESTER

Opticianry 036 (1)
Opticianry 040 (1)
Opticianry 098 (4)
Opticianry 201 (1)
General Education

*A minimum grade of C is required for progression in all Opticianry courses.

(See Pages 24-26, and Section V)

PHILOSOPHY

Recommended Courses:

Foreign Language *155-165-	Philosophy 101 (3)
175-185 (5) (5) (4) (4)	Philosophy 103 (3)
History 160-161 (3) (3)	Psychology 107 (3)
*French or German	
*Foreign Language 150-151 is equivalent to Foreign Language 155	
Foreign Language 160-161 is equivalent to Foreign Language 165	

(See Pages 24-26, and Section V)

PHYSICS

Recommended Courses:

Chemistry 160-161 (5) (5)	Physics 200-210 (4) (4)
Mathematics 153-154 (4) (4)	Physics 202 (4)
Mathematics 253-254 (4) (4)	

(See Pages 24-26, and Section V)

POLITICAL SCIENCE

Students who intend to major in political science should consult the catalog of the college in which they expect to complete their major, since graduation requirements vary. The following curriculum is suggested as a general guide for the first two years of college.

History 100-101 (3) (3)	Political Science 203 (3)
Political Science 100 (3)	Political Science 212 (3)

(See Pages 24-26, and Section V)

PRE-DENTAL HYGIENE

Recommended Courses:

Biology 130-131 (5) (5)	Microbiology 203 (5)
Chemistry 160-161 (5) (5)	Chemistry 214-215 (4) (4)

(See Pages 24-26, and Section V)

PRE-DENTISTRY

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 214-215 (4) (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

PRE-EDUCATION

This program is designed for those students who are interested in teaching in the California public schools. Recent credential legislation (Ryan Act) identifies four types of teaching credentials:

1. Single Subject instruction
2. Multiple Subject instruction
3. Specialist instruction
4. Designated Subjects instruction

For details, students should check with the Counseling Center.

Elementary:

Persons interested in teaching in the elementary schools typically pursue the Multiple Subjects credential which authorizes the holder to teach in any Self-contained classroom—classrooms in which one teacher is responsible for

teaching all subjects commonly taught in the elementary schools. The Ryan Act also mandates a series of examinations for a teaching credential, but the examination for this credential is waived if the student is a Liberal Studies or Diversified major.

In addition to the general education and lower division requirements for transfer, the following electives are recommended:

Art 115-116 (3) (3)	History 137 (3)
English 262-263 (3) (3)	Mathematics 138 (3)
Health Education 101 (3)	Music 100 (3)
	Sociology 105 (3)

Secondary:

Persons interested in teaching at the secondary level should pursue the Single Subject credential with a specific major. At the present, all candidates for this credential must pass the State examination covering their major field. Additional examinations must be taken to add subjects to the basic credential.

In addition to the general education and lower division requirements for transfer, the following electives are recommended:

Anthropology 102 (3)	Psychology 112 (3)
Economics 204 (3)	Sociology 100 (3)
Health Education 101 (2)	Sociology 105 (3)

(See Pages 24-26, and Section V)

PRE-ENGINEERING

The Pre-Engineering curriculum at Crafton Hills College is patterned after the first two years of a transfer engineering curriculum. Since requirements vary from one college to another, it is recommended that the Pre-Engineering student pattern his major to fulfill the lower division requirements at his school of transfer. This pattern of courses should be discussed with the student's adviser.

To complete the Pre-Engineering curriculum at Crafton Hills College in two years, it is essential that the student have completed the following minimum high school preparation with grades of "A" or "B":

Algebra - 2 years	Physics - 1 year
Chemistry - 1 year	Plane Geometry - 1 year
English - 3 years	Trigonometry - ½ year
Mechanical Drawing - 1 year	United States History - 1 year

Recommended Courses:

Chemistry 160-161 (5) (5)	Mathematics 153-154 (4) (4)
Engineering 160 (4)*	Mathematics 253-254 (4) (4)
Engineering 125 (2)*	Physics 110-111 (4) (4)
Engineering 126 (2)*	

*Available at San Bernardino Valley College only.

(See Pages 24-26, and Section V)

PRE-FORESTRY

Recommended Courses:

Biology 130-131 (5) (5)	Physics 110-111 (4) (4)
Chemistry 160-161 (5) (5)	Mathematics 108 (4)
Mathematics 153-154 (4) (4)	

(See Pages 24-26, and Section V)

PRE-LEGAL

Law schools do not prescribe a definite Pre-Legal curriculum; however, they all require a broad program stressing the Social Sciences. A broad general education helps the student by exposing him to more of the complex problems of our society and provides him with a greater acuity for logical perception and in-depth analysis. It is essential that the student possess fluency and precision in speaking and writing.

In all cases the student is urged to obtain the catalog of the Law school of his choice and to pattern his program to meet those requirements.

Recommended Courses:

Accounting 210-220 (3) (3)	Philosophy 103 (3)
Accounting 211-221 (1) (1)	Political Science 100 (3)
Economics 204-205 (3) (3)	Psychology 107 (3)
English 100-152 (3) (3)	Sociology 100 (3)
History 100-101 (3) (3)	Speech 103-105 (3) (3)
History 160-161 (3) (3)	

(See Pages 24-26, and Section V)

PRE-MEDICAL RECORD ADMINISTRATION

In accordance with a growing interest in pre-professional curriculum in liberal arts and community colleges, a suggested curriculum for students preparing for admission to accredited schools for Medical Record Administrators is listed below:

Recommended Courses:

Anatomy/Physiology 150-151 (4) (4)	Music 120 (3)
Art 100 (3)	Philosophy 101 (3)
Biology 120-150 (4) (2)	Psychology 107 (3)
English 100-152 (3) (3)	Mathematics 108 (4)
Literature (3)	Speech 103 (3)
	Sociology 100 (3)

(See Pages 24-26, and Section V)

PRE-MEDICINE

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 214-215 (4) (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

PRE-NURSING

The California State University and Colleges and Loma Linda University:

Recommended Courses:

Anatomy/Physiology 150-151 (4) (4)	Microbiology 150 (5)
Chemistry 101-102 (4) (4)	Psychology 107 (3)
English 100-152 (3) (3)	Sociology 100 (3)

University of California:

Recommended Courses:

Anatomy/Physiology 150-151 (4) (4)	Chemistry 160-161 (5) (5)
Anthropology 102 (3)	English 100-152 (3) (3)
Biology 201 (4)	Microbiology 203 (5)

(See Pages 24-26, and Section V)

PRE-OPTOMETRY

The requirements for admission to the schools and colleges of optometry vary. However, in all schools, emphasis is placed on mathematics, physics, chemistry, biology, or zoology. Some schools require additional courses, such as psychology, social sciences, literature, philosophy and foreign language.

Recommended Courses:

Biology 201 (4)	Mathematics 153 (4)
Chemistry 160 (5)	Microbiology 203 (5)
Chemistry 102 (4)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

PRE-PHARMACY

The requirements for admission to the various Schools of Pharmacy vary widely and take from one year to two years. Some institutions have a five-year program, while others have a six-year program leading to a Doctor of Pharmacy Degree. It is therefore very important that the student decide early which school he plans to attend and select his courses accordingly. If the student cannot decide on a school, the following courses are recommended for the first year of Pre-Pharmacy.

Recommended Courses:

Biology 130-131 (5) (5)	Mathematics 153-154 (4) (4)
Chemistry 160-161 (5) (5)	

(See Pages 24-26, and Section V)

PRE-PHYSICAL THERAPY

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 102 (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

PRE-VETERINARY MEDICINE

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 214-215 (4) (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

PSYCHOLOGY

Recommended Courses:

Psychology 107-108 (3) (3)	Mathematics 108 (4)
Psychology 103 (3)	Sociology 100 (3)

REAL ESTATE

Recommended Courses:

Business Adm. 101-217 (3) (3)	Real Estate 100-200 (3) (3)
Business Adm. 052 (3)	Real Estate 205-210 (3) (3)
Marketing 101 (3)	Real Estate 215 (3)
	Secretarial 100 (3)

(See Pages 24-26, and Section V)

RELIGIOUS STUDIES

A program designed to provide the two-year Associate in Arts Degree student and transfer student a broad spectrum of courses dealing with the origins and function of religion, man's religious modes of expression, and religious history and philosophy, sufficient to provide a strong background for those interested in entering the ministry, teaching or allied fields.

Recommended Courses:

Foreign Language *155-165-175-185 (5) (5) (4) (4)	Philosophy 103 (3)
History 160-161 (3) (3)	Religious Studies 100 (3)
History 135 (3)	Religious Studies 111 (3)
Philosophy 101 (3)	Religious Studies 112 (3)

*Foreign Language 150-151 is equivalent to Foreign Language 155

Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

RESPIRATORY THERAPY

This major will enable the student to meet entry level employment requirements in the field of Respiratory Therapy.

Required Courses:

Respiratory Therapy 101 (3)	Respiratory Therapy 110 (2)
Respiratory Therapy 102 (4)	Respiratory Therapy 111 (2)
Respiratory Therapy 103 (5)	Respiratory Therapy 121 (4)
Respiratory Therapy 104 (6)	Respiratory Therapy 122 (4)
Respiratory Therapy 105 (3)	Respiratory Therapy 124 (6)
Respiratory Therapy 106 (2)	Respiratory Therapy 125 (4)
Respiratory Therapy 107 (6)	Respiratory Therapy 128 (9)
Respiratory Therapy 108 (6)	

Plus:

Microbiology 150 (5)	Emergency Medical Care 050 (1)
Anatomy/Physiology 150/151 (4) (4)	Emergency Medical Care 076 (3)
Chemistry 101 (4)	Math 051 (3)
Physics 110 (4)	Psychology 107 (3)
Biology 050 (3)	

(See Pages 24-26, and Section V)

SECRETARIAL

Recommended Courses:

Secretarial 100 (3)	Secretarial 132 (6)
Secretarial 103 (3)	Secretarial 135 (2)
Secretarial 106 (3)	Secretarial 140 (3)
Secretarial 118 (6)	Secretarial 141 (6)
Secretarial 119 (6)	Secretarial 053 (1)

NOTE: A minimum of 18 units from the above list of courses is required for the major.

(See Pages 24-26, and Section V)

SOCIOLOGY

The field of Sociology offers vocational opportunities in teaching, demography, intergroup relations, industrial relations, public opinion sampling, human ecology, criminology, community relations, family relations, urban

planning, and related areas. This curriculum is designed to meet the graduation requirements for Crafton Hills College and junior standing at the senior college and university level. Consult the catalog of the college you plan to attend, as requirements vary.

Recommended Courses:

Anthropology 102 (3)	Mathematics 108 (4)
Biology 120 (4)	Sociology 100 (3)
Economics 100 (3)	Sociology 105 (3)
Psychology 107 (3)	

(See Pages 24-26, and Section V)

SPEECH AND THEATRE ARTS

Recommended Courses:

Foreign Language *155-165	Speech 103-105 or 141-142 (3) (3)
175-185 (5) (5) (4) (4)	Speech 120-151 (3) (3)
Psychology 107-108 (3) (3)	

*Foreign Language 150-151 is equivalent to Foreign Language 155

Foreign Language 160-161 is equivalent to Foreign Language 165

(See Pages 24-26, and Section V)

WELDING TECHNOLOGY

Recommended Courses:

Drafting (3)	Welding 017 (6)
English or Speech (3)	Welding 020 (6)
Mathematics 051 (3)	Welding 031 (½)
Welding 013 (6)	Welding 034 (½)

(See Pages 24-26, and Section V)

ZOOLOGY

Recommended Courses:

Biology 130-131 (5) (5)	Chemistry 214-215 (4) (4)
Chemistry 160-161 (5) (5)	Physics 110-111 (4) (4)

(See Pages 24-26, and Section V)

SECTION IV

OCCUPATIONAL CERTIFICATE PROGRAMS AND COOPERATIVE WORK EXPERIENCE EDUCATION

OCCUPATIONAL CERTIFICATE PROGRAMS

ACCOUNTING	MARKETING MANAGEMENT
ADMINISTRATION OF JUSTICE	OPTICIANRY
AUTO BODY TECHNOLOGY	ORNAMENTAL HORTICULTURE
AUTOMOTIVE MACHINIST	PHOTOGRAPHY
AUTOMOTIVE TECHNOLOGY	REAL ESTATE
AUTOMOTIVE TUNE-UP	RESPIRATORY THERAPY
AUTOMOTIVE WHEEL	RETAILING AND FASHION
ALIGNMENT AND BRAKES	MERCHANDISING
BUSINESS/COMMERCIAL DESIGN	SECRETARIAL/CLERICAL/
COMPUTER INFORMATION	CLERK-TYPIST
SCIENCES (Pre-Certificate)	STENOGRAPHER
EMERGENCY MEDICAL CARE	SUPERVISION
LANDSCAPE MAINTENANCE	

NEED FOR CERTIFICATE

Many adults are returning to community colleges to obtain special training. They report that it is difficult to secure or hold a position without special skills training. High school and college students should consider preparing for one of these certificates of proficiency well in advance of graduation.

Included here are the requirements for the certificates of occupational proficiency issued by Crafton Hills College. These certificates are given upon completion of specific occupational training requirements. The certificate programs provide instruction in the skills and knowledge needed to enter and make progress in a skilled and semi-professional occupation. The area employment prospects are good for people holding these certificates.

College Academic Courses Not Required

Students working for certificates are not typically required to take advanced college academic courses. However, they must have the basic knowledge of such subjects as arithmetic, reading, and writing required to learn and work in the occupation they select.

In many occupational degree majors, a student, with the proper selection of electives, may complete a Certificate in a field different from his main concentration in the Associate Degree. By doing so, the student is obtaining skills in two different areas and increasing his chances for successful employment.

WHY A CERTIFICATE

Certificates enable the "holder" to gain advanced (semi-skilled and skilled) and semi-professional employment at less expense than the Associate Degree program.

Certificates provide back-up training or job experience for immediate employment in case of interruption of formal education.

Therefore, the certificate is offered to students whose educational goals differ from those required for an academic degree. California law provides that the certificate may be authorized by the local Board of Trustees upon satisfactory completion of the designated occupational curriculum. Thus consistent with one of the major functions of the community college, occupationally oriented curricula designed to provide specific job skills are made available.

CERTIFICATE PROGRAM BROCHURES

Most occupational certificate programs have more detailed information in brochures published by Crafton Hills College. These brochures provide information about the worker in his career field, requirements for employment, and the nature of the work. Advisers and counselors assisting students in selecting a career should study the brochures carefully.

PROCEDURES FOR ENTERING A CERTIFICATE PROGRAM

Students desiring to take a certificate program should examine in detail this section of the catalog and confer with a counselor.

USING THE CERTIFICATE PROGRAM AS A MAJOR FOR AN ASSOCIATE DEGREE

The courses in the occupational certificate program which are completed at Crafton Hills College satisfy part or all of the requirements for a major required for the Associate Degree offered by the College. Courses taken in high school do not reduce the total number of units (60) needed to graduate with an Associate Degree, nor do they reduce the total number of units that must be taken for the major. For courses needed for the degree, refer to another section of the Crafton Hills College Catalog. The additional course work needed for a degree may be taken after the certificate has been completed and will be found in the Associate Degree curricula section of this Catalog.

CREDIT FOR OTHER TRAINING

Training programs, such as military courses, apprenticeship, or other school training may be evaluated for credit toward a certificate program. A minimum of 12 units must be completed at Crafton Hills College before the evaluation will be valid. Practical or written examinations may be required for this evaluation.

HOW TO OBTAIN A CERTIFICATE

Upon completion of all courses listed on the Certificate Program, the student should report to the Admissions Office or the Evening College Office and make application to be awarded the Certificate.

ACCOUNTING CERTIFICATE

Certificate requirements include a minimum of five core courses —one from each of five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:

		UNITS
Accounting 210	Principles of Accounting	3
Accounting 211	Principles of Accounting Laboratory	1
Accounting 220	Principles of Accounting	3
Accounting 221	Principles of Accounting Laboratory	1
Accounting 225	Intermediate Accounting	3
Accounting 026	Cost Accounting	4
TOTAL		15

ADMINISTRATION OF JUSTICE CERTIFICATE

The Administration of Justice Certificate is designed for those students who are interested in a one-year program designed to provide entry-level knowledge for those interested in the wide range of law enforcement employment.

		UNITS
Adjus. 101	Intro. to Admin. of Justice	3
Adjus. 102	Principles & Procedures of the Justice System	3
Adjus. 103	Concepts of Criminal Law	3
Adjus. 104	Legal Aspects of Evidence	3
Adjus. 105	Community Relations	3
IN ADDITION, SELECT ONE OF THE FOLLOWING:		
Adjus. 106	Principles of Investigation	3
Adjus. 107	Concepts of Enforcement Services	3
Adjus. 108	Juvenile Procedures	3
Adjus. 109	Police Records and Report Writing	3
TOTAL		18

RECOMMENDED FOR MAJORS:		
Span. 150-151	Spoken Spanish	5
Soc. 105	Social Problems	3
Soc. 141	Ethnic Relations	3

AUTOMOTIVE CERTIFICATES

AUTO BODY TECHNOLOGY CERTIFICATE

Automotive body repairpersons are skilled craftspeople, who repair damaged motor vehicles by straightening bent frames, removing dents from fenders and body panels, welding torn metal, and replacing badly damaged parts. This program also includes the techniques involved in the removal and replacement of upholstery and glass, and the skills necessary for automobile painting. Surveys indicate that there is a continuing demand for persons skilled in this occupation both locally and nationally.

		UNITS
Auto Body 010-018	Autobody Repair and Refinishing	16
Welding Tech. 013	Basic Oxy-Acetylene Welding	2
Auto Body 020	Autobody Collision Appraisal	3
Mathematics	Math 001, 051 or Busad 052	3
English	English 100 or 015	3
	TOTAL	27

AUTOMOTIVE MACHINIST CERTIFICATE (Engine Re-Building)

		UNITS
Auto Tech. 013-014	Automotive Machinist: Engine Rebuilding	9
Auto Tech. 030	Automotive Mechanics	4
Auto Tech. 042	Engine Tune-up and Trouble Diagnosis	4
English	English 100 or 015	3
Mathematics	Math 001, 051 or Busad 052	3
	TOTAL	23

AUTOMOTIVE TECHNOLOGY CERTIFICATE

This certificate program is designed to provide students with the capability for entry-level employment as automotive mechanic helpers (tune-up) or assistant automotive-service mechanics (tune-up). Successful completion of the certificate program will qualify the student for assignments such as a new car get-ready mechanic or for minor tune-up in a service station. Further work experience and training will be required for additional responsibility and advancement in the field.

		UNITS
English	English 100 or 015	3
Auto Tech. 030-031	Automotive Mechanics	9
Auto Tech. 042	Engine Tune-up and Trouble Diagnosis	4
Welding Tech. 013	Basic Oxy-Acetylene Welding	2
Mathematics	Math 001, 051 or Busad 052	3
	TOTAL	21

AUTOMOTIVE TUNE-UP CERTIFICATE

The certificate program's purpose is to provide students with the ability for entry-level employment as Automotive Mechanics. Successful completion of the Certificate Program will qualify the student to enter the world of work in such positions as a new car get-ready mechanic or tune-up in a service station. Additional Work Experience will be required for advancement in the field.

		UNITS
Auto Tech. 042-043	Engine Tune-up and Trouble Diagnosis	9
Auto Tech. 030	Automotive Mechanics	4
English	English 100 or 015	3
Mathematics	Math 001, 051 or Busad 052	3
	TOTAL	19

AUTOMOTIVE WHEEL ALIGNMENT AND BRAKES CERTIFICATE

This program is designed for students wishing to obtain a certificate in Wheel Alignment and Brakes for entry-level employment in a specialty shop.

		UNITS
Auto Tech. 018-019	Auto Brake Repair and Front End Alignment	10
Auto Tech. 030-031	Automotive Mechanics	12
Welding Tech. 013	Basic Oxy-Acetylene Welding	2
Welding Tech. 017	Basic DC Arc Welding	2
Math 051	Review Arithmetic and Introd. to Algebra	3
English or Speech	English 100 or 015 or Speech 103	3
	TOTAL	32

CENTRAL TO THE CAMPUS

The Crafton Hills College library shelves more than 68,000 volumes plus some 5800 bound periodicals. Additionally CHC students have immediate access to the library resources of 20 other colleges and universities in Southern California.

BUSINESS CORE COURSE REQUIREMENTS FOR CERTIFICATES

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

A minimum of five of the above courses (one from each of five groups) is required for all business certificates. Certificate requirements include the five core courses plus specific specialty courses as specified for each certificate.

Transfer students should select transferable courses within the core group with course numbers 100 through 299 series and review programs with staff counselors.

ACCOUNTING CERTIFICATE	BUSINESS/ COMMERCIAL DESIGN CERTIFICATE	COMPUTER INFORMATION SCIENCES PRECERTIFICATE	MARKETING MANAGEMENT CERTIFICATE	RETAILING & FASHION MERCHANDISING CERTIFICATE	SUPERVISION CERTIFICATE
Page 127	Page 131	Page 131	Page 132	Page 133	Page 134
Acct. 210	Mkt. 110	CIS 101	Mkt. 105	Mkt. 105	sup. 010
Acct. 211	Busad. 150	CIS 104	Mkt. 110	Mkt. 110	sup. 012
Acct. 220	Busad. 152	CIS 202	Mkt. 115 or	Mkt. 115	Sup. 013
Acct. 221	Busad. 160	CIS 203	Bus. 105	Mkt. 120	Sup. 014
Acct. 225	Busad. 165	(12 units)	Mkt. 212	Mkt. 125	Sup. 015
Acct. 026 (15 units)	Mkt. 099 or Bus. Elective (18 units)		Mkt. 099 or Bus. Elective (15-16 units)	Mkt. 099 or Req. Elective (18-19 units)	(15 units)

BUSINESS/COMMERCIAL DESIGN CERTIFICATE

Certificate requirements include a minimum of five core courses - one from each of five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:

	UNITS
Market 110	Principles of Advertising 3
BUSAD 150	Advertising Layout and Design I 3
BUSAD 152	Advertising Layout and Design II 3
BUSAD 160	Product and Package Illustration and Design 3
BUSAD 165	Fashion and Soft Goods Illustration 3
Market 099	Marketing Field Practice 3
or	
Business Elective	(Student's Choice) 3
	TOTAL 18

COMPUTER INFORMATION SYSTEMS PRECERTIFICATE

Certificate requirements include a minimum of five core courses - one from each of five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:

	UNITS
CIS 101	Survey of Data Processing 3
CIS 104	Fortran IV 3
CIS 202	Programming Business Applications (COBOL) 3
CIS 203	Programming Business Applications (COBOL) 3
	TOTAL 12

EMERGENCY MEDICAL CARE CERTIFICATE

Emergency Medical Care curriculum is designed to serve a fourfold purpose: (1) To provide properly trained personnel for the delivery of fast, efficient emergency medical care for the sick and injured at the scene and during transport to a health care facility. (2) To reduce the mortality rate during the first critical minutes following an accident or the onset of a serious physical condition. (3) To relieve the pressure created by a critical shortage of professionally trained medical and nursing personnel available for on-the-scene emergency medical care. (4) To provide an economical system for the delivery of improved quality emergency medical care.

		UNITS
EMC 060	Emergency Medical Technician 1/1A	6
Anatomy/Phys. 060	General Anatomy and Physiology	3
Biology 050	Medical Terminology	3
EMC 049	Introduction to Emergency Medical Care	1
EMC 070	Cardiology	3
EMC 076	Introduction to Pharmacology and Drug Therapy	3
EMC 080	Pre-Hospital Care I	4
EMC 082	Pre-Hospital Care II	4
EMC 084	Pre-Hospital Care III	6
	TOTAL	33

LANDSCAPE MAINTENANCE CERTIFICATE

This certificate program is planned to prepare students as grounds person for city, county or school park maintenance, or for self-employment in the field.

		UNITS
AGRI 105	Plant Identification: Shrubs	3
AGRI 106	Plant Identification: Trees	3
AGRI 112	Landscape Maintenance	3
AGRI 114	Nursery Practices	3
AGRI 116	Suburban Planning	3
AGRI 129	Soils and Fertilizers	3
AGRI 131	Plant Pest Control	3
AGRI 133	Turf Management	3
AGRI 135	Irrigation and Sprinklers	3
BUS AD 217	Business Law	3
or		
BUS AD 015	Basic Legal Principles (SBVC only)	3
	TOTAL	30

MARKETING MANAGEMENT CERTIFICATE

Certificate requirements include a minimum of five core courses - one from each of five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:

		UNITS
Marketing 105	Principles of Salesmanship	3
Marketing 110	Advertising	3
Marketing 115 or	Retailing	3
Business Adm. 105	Small Business Management	3
Marketing 212	Sales Management	3
Marketing 099 or	Marketing Field Practice	4
Business Elective	(Student's Choice)	3
	TOTAL	15-16

OPTICIANRY CERTIFICATE

This program is designed to prepare students for occupational employment in the field of Opticianry. Opticianry deals with optical instruments and the preparation and dispensing of eyeglasses including contact lenses.

FALL

		UNITS
opt 012	Ophthalmic Lab Techniques I	4
Opt 016	Ophthalmic Lenses	3
Opt 018	Ophthalmic Fabrication I	2
opt 022	Anatomy and Physiology of the Eye	3
Phy 101	Physics	4
TOTAL		16

SPRING

		UNITS
Opt 014	Ophthalmic Techniques I	4
Opt 024	Ophthalmic Dispensing	5
Opt 032	Contact Lenses I	3
TOTAL		14
YEAR TOTAL		30

ORNAMENTAL HORTICULTURE CERTIFICATE

This certificate program is planned to enable the student to enter employment in wholesale or retail nurseries. Employment opportunities are readily available for both men and women.

		UNITS
AGRI 103	Introduction to Agronomy	3
AGRI 105	Plant Identification: Shrubs	3
AGRI 106	Plant Identification: Trees	3
AGRI 107	Plant Identification: Herbaceous Plants	3
AGRI 108	Plant Identification: Indoor Plants	2
AGRI 110	Applied Vocational Botany	3
AGRI 114	Nursery Practices	3
AGRI 129	Soils and Fertilizers	3
AGRI 131	Plant Pest Control	3
AGRI 062-063	Nursery Sales	2-2
BUS AD 217	Business Law	3
or		
BUS AD 015	Basic Legal Principles (SBVC only)	3
TOTAL		33

PHOTOGRAPHY CERTIFICATE

This certificate program enables a student to enter employment in any phase of the photographic industry.

		UNITS
Photo 150	B & W Photography	4
Photo 151	Int. B & W Photography	4
Photo 152	Adv. B & W Photography	4
Photo 250	Color Photography	4
TOTAL		16

PLUS FROM THE FOLLOWING COURSES ANY 3 UNITS: 19 units

Photo 154	History of Photography	3
Photo 160	Process Camera	3
Photo 222	Special projects in Photography	1-4
Photo 230	Photo. for the Natural Sciences	2
Photo 252	Adv. Color Photography	4

REAL ESTATE CERTIFICATE

This certificate program is designed for day and evening students. Candidates may apply all units toward the associate degree. Single courses are open to individuals who do not wish to pursue the entire certificate program but who may wish to prepare for the California Division of Real Estate broker's examination.

		UNITS
*Real Estate 100	Real Estate Principles	3
**Real Estate 200	Real Estate Practice	3
**Real Estate 205	Real Estate Appraisal: Residential	3
**Real Estate 210	Real Estate Finance	3
**Real Estate 215	Legal Aspects of Real Estate	3
**Real Estate 230	Real Estate Economics	3
	•Electives	6
	TOTAL	24

*Suggested first course.

**These courses are mandatory prerequisites to real estate broker's licensing. (Effective January 1, 1975, applicants for Real Estate broker's license must have completed 6 (3 unit) courses.)

•Select any two of the following: Accounting 210, Business Admin. 101, 105, 217, Real Estate 101, Marketing 101, Real Estate 207 or 216.

RESPIRATORY THERAPY TECHNICIAN CERTIFICATE

This certificate will enable the student to meet entry level employment in the field of Respiratory Therapy.

REQUIRED COURSES:

First Semester		UNITS
Resp. Ther. 101	Fundamentals of Respiratory Therapy I	3
Resp. Ther. 102	Fundamentals of Respiratory Therapy Skills Lab I	4
Resp. Ther. 104	Respiratory Therapy Clinical Application I	6
EMC 050	Cardiopulmonary Resuscitation	1
Mathematics 051	Review Arithmetic and Intro. to Algebra	3
Anatomy/Phys. 150	Human Anatomy and Physiology	4
Biology 050	Medical Terminology	3
	TOTAL	24
		(20 weeks)

Second Semester		
Resp. Ther. 105	Fundamentals of Respiratory Therapy II	3
Resp. Ther. 106	Fundamentals of Respiratory Therapy Skills Lab II	2
Resp. Ther. 108	Respiratory Therapy Clinic Application II	6
Resp. Ther. 110	Clinical Application of Respiratory Therapy	2
Anatomy/Phys. 151	Human Anatomy and Physiology	4
Psychology 107	General Psychology	3
	TOTAL	20
		(20 weeks)

RETAILING AND FASHION MERCHANDISING CERTIFICATE

Certificate requirements include a minimum of five core courses - one each from five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:		UNITS
Marketing 105	Principles of Salesmanship	3
Marketing 110	Advertising	3
Marketing 115	Retailing	3
Marketing 120	Principles of Buying and Mdse. Mgt.	3
Marketing 125	Principles of Visual Merchandising	3
Marketing 099 or	Marketing Field Practice	4
Required Elective	(Sales Mgt., Mkt. 212. Sm. Bus..	
Mgt. 105 or Fashion Illustration)		3
TOTAL		18-19

SECRETARIAL-CLERICAL CERTIFICATES

CLERK-TYPIST CERTIFICATE

		UNITS
Secretarial 100	Beginning Typewriting	3
Secretarial 103	Intermediate Typewriting (Proficiency level-50 words a minute)	3
Secretarial 140	Records Management	3
Secretarial 141	Office Training	6
Secretarial 053	Office Experience	2
Business Admin. 052	Applied Business Mathematics	3
Accounting 205	Bookkeeping	3
TOTAL		23

STENOGRAPHER CERTIFICATE

		UNITS
Secretarial 100	Beginning Typewriting	3
Secretarial 103	Intermediate Typewriting (Proficiency level-60 words a minute)	3
Secretarial 118	Elementary Shorthand (Gregg)	6
Secretarial 119	Intermediate Shorthand (Gregg) (Proficiency level-80 words a min. for 3 min.)	6
Secretarial 140	Records Management	3
Secretarial 141	Office Training	6
Secretarial 053	Office Experience	2
Business Admin. 052	Applied Business Mathematics	3
Accounting 205	Book keeping	3
TOTAL		35

SUPERVISION CERTIFICATE

Certificate requirements include a minimum of five core courses - one from each of five of the seven groups listed below:

BUSINESS CORE COURSE REQUIREMENTS:

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 101-Principles of Marketing
3. Business Administration 101-Introduction to Business
4. Economics 100, 112, 204, 205 (any 3 units)
5. Business Administration 217-Business Law
6. Business Administration 052-Business Math or Mathematics 108-Statistics
7. Secretarial 100-Typewriting

PLUS THE FOLLOWING SPECIALTY COURSES:

		UNITS
Supervision 010	Elements of Supervision	3
Supervision 012	Basic Psychology for Supervisors	3
Supervision 013	Human Relations	3
Supervision 014	Written Communication for Supervisors	3
Supervision 015	Organization and Management	3
	TOTAL	15

COOPERATIVE WORK EXPERIENCE EDUCATION

The Cooperative Work Experience program at Crafton Hills College makes it possible for students to earn college credits for work experience in technical, business, or professional settings. Students are employed in positions which supplement classroom experience and provide income. In addition, they are required to attend a seminar for one hour per week. A maximum of 16 Work Experience units can be applied toward graduation, certificate requirements, and Veterans Education Benefits. Four units of credit are earned for attending the seminar plus 15 hours work per week.

A student must be employed to be eligible for this program. Any student in good standing who is in a planned program and is employed 15 hours per week in an ongoing program of new learning experiences, relative to his major, may participate. The student must be enrolled in 7 units each regular semester of which 4 must be in work experience. For summer sessions, see summer session schedule.

Enrollment Procedure

To participate in this program, the student must do the following during the first week of the semester:

1. Obtain a job directly related to his occupational major.
2. Obtain an application for Enrollment, a copy of the Work Agreement, and a Schedule of Work Experience Education Classes from the Instructor-Coordinator.
3. Complete the Application for Enrollment.
4. Complete and sign the Work Agreement.
5. Be interviewed by the Instructor-Coordinator of Work Experience Education before receiving final approval.
6. Take the Work Agreement to his employer for approval.

Grades will be based on performance evaluations completed by the employer and Instructor-Coordinator, cooperation with counselors, coordinators and employers, and completion of any required reports. Failure to attend the job-related class cancels credit for work experience courses.

SECTION V

REQUIREMENTS FOR TRANSFER TO FOUR-YEAR COLLEGES AND UNIVERSITIES

ADMISSION TO FRESHMAN STANDING

A specific high school subject pattern and grade-point average in addition to a satisfactory score on a nationally normed test is usually required for admission to freshman standing at most four-year institutions.

HIGH SCHOOL ENTRANCE DEFICIENCIES

Students having entrance deficiencies which must be removed before transferring to a four-year institution can usually do so at a Community College. One high school unit deficiency (one year) is the equivalent of three Community College units (one semester). The State university accepts full college credit for transferable Community College courses used to remove all high school grade deficiencies. The pattern for making up deficiencies accepted by the University of California is generally accepted by other four-year institutions.

ADMISSION TO ADVANCED STANDING

All four-year institutions prescribe their own standards for evaluation and admissions requirements. These standards are subject to change from year to year. Students planning to transfer should study the admission regulations and transfer conditions of the institution to which they intend to transfer as early as possible in their college career. The college catalog is usually the best source for this information.

ORGANIZATION AND CAMPUSES OF THE UNIVERSITY OF CALIFORNIA

The University of California has nine major campuses - Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, and Santa Cruz. All are on a quarter-unit system. When converting semester units to quarter units, divide the number of semester units by two-thirds. When converting from quarter to semester units, multiply by two-thirds. While all campuses have similar general lower division requirements and will accept a maximum of 70 semester or 105 quarter units of transfer work, there are some subject differences among the colleges. Students desiring a transfer to the University should make certain they are meeting the lower division requirements of the college to which they are transferring.

UNIVERSITY OF CALIFORNIA

ADMISSION IN ADVANCED STANDING

Prospective students may apply for admission to any of the campuses of the University of California. The admission cycle for the fall quarter of each year begins on November 1. Each campus will accept for consideration all applications filed during the month of November. Enrollment ceilings have been established at each campus. Students may have to attend a campus of their second choice.

The University defines an "advanced standing applicant" as a high school graduate who has been a registered student in another college or university or in college-level extension classes other than a summer session immediately following high school graduation. An advanced standing applicant may not disregard his college record and apply for admission as a freshman.

ADVANCED STANDING ADMISSION REQUIREMENTS

As you will see below, the requirements for admission in advanced standing vary according to your high school record. If you have completed less than twelve quarter or semester units of transferable college credit since high school graduation, you must also satisfy the examination requirement for freshman applicants.

The transcript you submit from the last college you attended must show, as a minimum, that you were in good standing and that you had earned a grade-point average of 2.0 or better. If your grade-point average fell below 2.0 at any one college you attended, you may have to meet additional requirements in order to qualify for admission.

As an advanced standing applicant you must also meet one of the following conditions:

1. If you were eligible for admission to the University as a freshman, you may be admitted in advanced standing any time after you have established an overall grade-point average of 2.0 or better in another college or university.
2. If you were not eligible for admission as a freshman only because you had not studied one or more of the required high school subjects, you may be admitted after you have:
 - a. Established an overall grade-point average of 2.0 or better in another college or university.
 - b. Completed, with a grade of C or better, appropriate college courses in the high school subjects that you lacked, and
 - c. Completed twelve or more quarter or semester units of transferable college credit since high school graduation or have successfully passed the CEEB tests required of freshman applicants.
3. If you were not eligible for admission as a freshman because of low scholarship or a combination of low scholarship and a lack of required subjects, you may be admitted after you have:
 - a. Established an overall grade-point average of 2.4 or better in another college or university.

- b. Completed, with a grade of C or better, appropriate college courses in high school subjects that you lacked. Up to two units (a unit is equal to a year's course) of credit may be waived.
- c. Completed 84 quarter units (56 semester units) of college credit in courses accepted by the University for transfer.

University of California, Riverside

For specific courses required for the various majors, see the UCR catalog and consult your counselor or adviser.

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

A.B. and B.S. Degree

English Composition: English 100-152.

Humanities: 14 units to be taken in two or more different departments or programs, and excluding non-literature English courses and studio, technical or performance courses. Courses to fulfill this requirement should be chosen from Art Appreciation/History. Creative Writing, German, French, Literature. Music Appreciation/History, Philosophy, Religious Studies, Spanish, and Theatre Appreciation/History. A maximum of 3 units related to the Humanities to be chosen from courses in Black Studies, Chicano Studies, and Latin American Studies may be counted toward the Humanities requirement. The 14 units shall include at least 3 units focusing on an ethnic group or foreign area - lower division language courses will not satisfy this requirement.

Social Sciences: 11 units to be taken in two or more different departments or programs from the following: Anthropology, Economics, Political Science, Psychology, or Sociology. A maximum of 3 units related to the Social Sciences to be chosen from courses in Black Studies, Chicano Studies, and Latin American Studies may be counted toward the Social Sciences requirement. The 11 units shall include at least 3 units focusing on an ethnic group or foreign area - lower division language courses will not satisfy this requirement.

Sciences: 8 units to be taken in courses offered by the College of Natural and Agricultural Sciences, with the exception that 3 units in the history of science or the philosophy of science may be used in partial satisfaction of this requirement. All of the courses classified as natural sciences at Crafton Hills College or transferable mathematics courses will fulfill this requirement.

NOTE: No courses from a student's major discipline may be used in satisfaction of Humanities, Social Sciences, or Science requirements although courses in a second major or courses required for the major but outside the major discipline may be used in satisfaction of the requirements. Also, the same course may not be used to meet two breadth requirements.

COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES

A.B. Degree

English Composition: English 100-152.

Foreign Language: May be satisfied by (a) completion of 3 semesters in

one language, or (b) completion of 2 semesters each in two different languages or (c) completion of four years of one language in high school.

Humanities and Social Sciences: A minimum of 22 units with no fewer than 6 units from each. Not more than 4 units of performance courses may be counted toward fulfillment of the Humanities requirement. The Humanities requirement should be fulfilled by taking courses in the following: History, Philosophy, Literature, and non-performance courses in Art, Theatre, and Music. The Social Sciences requirement should be fulfilled by taking courses in the following: Anthropology, Economics, Political Science, Psychology, or Sociology.

Natural Sciences: A minimum of 11 units to be selected from the Natural Sciences and not to include courses in Mathematics, Cultural Geography, or Statistics.

B.S. Degree

English Composition: English 100-152.

Humanities and Social Sciences: A minimum of 16 units with no fewer than 6 units from each. Courses used to satisfy the English Composition requirement may be counted in the 16 units. Lower division foreign language courses normally taken to satisfy a language requirement are not counted toward fulfillment of this requirement. The Humanities requirement should be fulfilled by taking courses in the following: History, Philosophy, Literature, and non-performance courses in Art, Theatre, and Music. The Social Sciences requirement should be fulfilled by taking courses in the following: Anthropology, Economics, Geography, Political Science, Psychology, or Sociology.

Natural Sciences: A minimum of 11 units to be selected from the Natural Sciences and not to include courses in Mathematics, Cultural Geography, or Statistics.

Upper Division or Substantive Courses: A minimum of 11 units in courses in a field or fields related to the major. These courses must be completed at UCR.

University of California, Los Angeles

For specific course requirements for the various majors. see the UCLA catalog and consult your counselor or advisor.

General University Requirements:

1. Subject A: English 100 with a grade of "C" or better (3 semester units).
2. American History and Institutions (see UCLA catalog): Either Political Science 100 (3 semester units) or one transferable course in United States History (3 semester units) taken at Crafton Hills College.
3. Foreign Language: The College of Letters and Science does not have a college-wide requirement for foreign language. Students should consult the catalog concerning language requirements for specific majors.

COLLEGE OF FINE ARTS

Majors offered in the College of Fine Arts include Art History, Dance Design, Ethnic Arts, Motion Picture/Television, Music, Painting/Sculpture/Graphic Arts, and Theatre.

The College admits students for the fall quarter only. Preference is given to those who have a 3.0 grade point average who have completed all the breadth requirements.

1. English Composition: English 100-152
2. American History and Institutions requirement: Any course used to meet the General University requirement may not apply for this requirement.
3. Foreign Language: 8 semester units in one language.
4. Science/Mathematics: Two courses required with at least one course to be chosen from biological or physical science.
5. Social Science: Three courses required including History 100-101.
6. Humanities: Three courses required and to include one course each in the Arts, Literature, and Philosophy/Religion. Performance, Studio, or Film courses will not fulfill this requirement.

COLLEGE OF LETTERS AND SCIENCE

English Composition: English 100-152

Area Requirements: Humanities, Life Sciences, Social Sciences, Physical Sciences

Students are required to complete 9 courses (27 semester units) distributed among the three divisions outside the division of the major field, with at least two courses in each division. Courses used for these requirements are subject to the following conditions:

1. All language courses level 4 or above may be applied as Humanities courses. Level 1, 2, and 3 courses may be used, provided that the student has completed the level 4 course in the same language. Conversational courses may not be used to satisfy the Humanities requirement. Breadth requirements credit for course in languages which do not offer level 4 courses is contingent on completion of the highest level offered.
2. Courses used to satisfy the English Composition Requirement may not also be used to satisfy the breadth requirements.
3. Courses required to satisfy the Major or other courses taken in the major department may not be used to satisfy the breadth requirements. However, courses outside the division of the major which are required as preparation for a Major may be used to satisfy these requirements.
4. Courses used to satisfy the American History and Institutions requirement may not also be used to satisfy the breadth requirements.

NOTE: For other transfer lower division requirements to the University of California system and a specific campus of your choice, please review the current catalog for that institution. For further information and help in planning, consult with a general counselor at Crafton Hills College.

University of California, Irvine

For specific course requirements for the various majors, see the UCI catalog and consult your counselor or advisor.

General University Requirements for the Baccalaureate Degree

1. Subject A: English 100 with a grade of "C" or better at Crafton Hills College.
2. American History and Institutions: Among options for meeting this requirement is the presentation of a certificate of completion at another collegiate institution. However, at UCI this requirement will have been met most frequently by the completion in high school with grades of "C" or better one semester each of American History and U.S. Government. Students matriculating at UCI without having met the requirements can satisfy it only by examination, for which no credit is received. Transfer students who have taken courses for this purpose, however, do receive credit and such courses are also applicable to the 6-3-3 requirement (Political Science 100 and one transferable course in United States History at Crafton Hills College will meet this requirement).
- *3. 6-3-3- Breadth Requirement (semester equivalencies at Crafton Hills College, 4-2-2): In contrast to most University of California campuses, UCI has no specific breadth requirements courses or areas. This requirement may be met by taking course work in three schools (Schools of Biological Sciences, Fine Arts, Humanities, Physical Sciences, or Social Sciences) outside the school of the student's major. (A student must take 4 semester-courses in one school outside his major and 2 semester-courses in each of two other schools outside his major).

*The breadth requirement does not apply to students majoring in the School of Engineering (see University of Irvine Catalog.)

NOTE: The above information is only a brief statement of the University of California, Irvine, general education requirements; thus it is most important that you check the current UCI catalog carefully. You may wish to review your plan for lower division work with a general counselor at Crafton Hills College.

THE CALIFORNIA STATE UNIVERSITY AND COLLEGES

The State University and Colleges system is one of the three branches of higher education within the State of California that is publicly controlled and financed. The system consists of 19 campuses, ranging from San Diego to Humboldt. Many Crafton Hills College graduates transfer to and complete their education at one of these fine institutions.

I. ADMISSIONS:

- A. Admission to freshman standing: The CSUC system has specific admission requirements for freshman standing. Eligibility is based upon a combination of the high school grade-point average for the last three years of high school, exclusive of physical education and military science, and the scores from the ACT or SAT test. Students seeking admission to freshman standing should

consult their high school counselor.

- B. Admission in Advanced Standing: Students who are ineligible for admission to freshman standing must complete a minimum of 56 transferable semester units of work with a 2.00 grade-point average or better before they are eligible to transfer.
- C. A maximum of 70 semester units earned at a Community College will be accepted toward the Bachelor's degree.
- D. Students transferring to one of the institutions in the CSUC system should carefully check the general education and major requirements as early in their first two years of college as possible.

II. REGULATIONS AND GENERAL EDUCATION

- A. Crafton Hills College may certify that a student has satisfied the minimum general education requirements of 40 units which should be and normally are completed in the lower division:
 - 1. Any State College may establish additional general education requirements for the Baccalaureate Degree program, provided that such requirements apply equally to transfer and native students. The current catalog for the institution to which the individual plans to transfer should be consulted.
 - 2. Thirty-two of the forty units in general education must be in the area of natural sciences, social sciences, humanities, and basic subjects, with at least two courses from each area. Electives may be chosen to total forty units.
 - 3. A student may take as many units in any category as he wishes; however, no more than twelve units will be counted toward meeting the general education requirements.
 - B. Specific courses and pattern requirements: Listed below are the courses and the pattern that will meet the lower division general education requirements and thus qualify students from Crafton Hills College to enter any of the California State Universities and Colleges.
- 1. **NATURAL SCIENCE:** 7-9 semester units minimum. Courses must include one life and one physical science, and one course must include a laboratory.

BIOLOGICAL

Anatomy/Physiology 150-151
Biology 120-122-123-130-131-201
Microbiology 150-203
Oceanography 101

PHYSICAL

Astronomy 150-160
Chemistry 101-102-160-161
Geography 110-111-114
Geology 100-112-150-252
Oceanography 101
Physics 101-110-111-200-201-202

- 2. **SOCIAL SCIENCE:** 9 semester units minimum. One course must be completed from each of the areas (a), (b), (c), listed below:
 - (a) **History 100-101-112-120-135-137-138-139-142-145
 - (b) **Political Science 100
 - (c) Anthropology 102 or 106, Geography 102, Psychology 103 or 107, Sociology 100 or 105

Additional courses may be taken from:

Anthropology 100
Economics 100-112-204-205
Geography 110-111-114-126
History 153-160-161-163-166-167-174-175-179
Political Science 203-206-212-215-218-225
Psychology 108-109-112-116-133
Sociology 131-141-170-171

****One course from each (a & b fulfills the U.S. and California Institutions requirement).**

3. **HUMANITIES** 6-9 semester units minimum.
Art 100-102-105
French 185-242
German 185-242
History 153-160-161-163-166-167-174-175-179
(unless used for Social Science)
Interdiscipline Studies 132-150
Literature-English 156-160-170-250-251-262-263-272-273-276
Music 100-120-121-124-125
Philosophy 101-105-115-116-117
Religious Studies 100-111-112-135
Spanish 185-235-236-242-244
Theatre Arts 100-108-109
4. **BASIC SUBJECTS:** 6 semester units minimum.
English 100 and three additional units from the following:
English 152
Foreign Language 150-151-155-160-161-165-175-210-225
Mathematics 104-105-108-138-153-154-201
Philosophy 103
Speech 103-105-120-121
5. **GENERAL ELECTIVES:** 2-4 units required.
Any course with a transfer number, i.e., with a course number from 100-299 which has not been used to meet another General Education requirement or is not in the student's major.

GENERAL EDUCATION REQUIREMENTS AT CALIFORNIA STATE COLLEGE, SAN BERNARDINO

Each student must complete 14 full-term courses (70 quarter units). Two of the courses are upper division and must be taken at CSCSB. Students should complete as many of the general requirements as possible at Crafton Hills College. Transfer students should complete the 40 semester unit pattern as outlined below:

- A. Basic Studies: Two courses
One course each from two of the four following areas:
 1. English 100
 2. Mathematics 104-105-153
 3. Philosophy 103
 4. Speech 103-120-141
- B. Humanities: Three courses
One course in the Arts:
 1. Art 100-102

2. Music 100-120-121-124-125
 3. Theatre Arts 100-108-109
- Two courses in Letters:
1. Foreign Language* 155-165-175-185 (must be two courses, otherwise will be used for electives)
 *Foreign Language 150-151 is equivalent to Foreign Language 155
 Foreign Language 160-161 is equivalent to Foreign Language 165
 2. French 242
 3. German 242
 4. History 153-160-161-163-166-167-174-175-179
 5. Literature-English 156-160-170-250-251-262-263-272-273-276
 6. Philosophy 101-105-115-116-117
 7. Religious Studies (all courses)
 8. Spanish 242-244
- C. Natural Sciences: Two courses (does not require a lab course)
 One course from Life Science:
1. Anatomy/Physiology 150
 2. Biology 120-122-123-130-131-201
 3. Microbiology 150-203
 4. Oceanography 101
- One course from Physical Science:
1. Astronomy 150
 2. Chemistry 101-160
 3. Geography 110-114
 4. Geology 100-112-150-252
 5. Oceanography 101
 6. Physics 101-110-200
- D. Social Sciences: Three courses
 Should include one course from each category:
1. History 100-101-112-120-135-137-138-139-142-145
 2. Political Science 100
 3. One additional course from any of the following:
 Anthropology, Economics, Geography, History. Political Science, Psychology, or Sociology
- E. Lower Division Electives: Two courses
 To be chosen from two of the four major categories (A, B, C, D) above.
- F. Physical Education
 Each student is required to complete 2 semester units of physical education. Students who are over 25 years of age are not required to take P.E. classes, but may substitute 2 semester units of their choice.

INDEPENDENT CALIFORNIA COLLEGES AND UNIVERSITIES

California's fully accredited independent colleges and universities provide a host of options at undergraduate, graduate and professional levels for students planning to continue their education beyond community college.

Students who transfer to independent colleges or universities find they are given academic credit for most, if not all, of their community college studies.

Virtually all institutions give full credit for general education courses and usually for other courses designated for transfer by the community college.

Some colleges and universities stipulate a certain number of completed units before considering students eligible for transfer. Others do not and will accept students at any time. The requirements are outlined in the respective college catalogs, available upon request from the college's Office of Admissions.

Independent institutions are generous in awarding credit. They invite you to make an appointment with their Office of Admissions in order to discuss your transfer opportunities on a personal basis.

Core Requirements for the University of Redlands

Every student working for a Bachelor of Arts or Bachelor of Science degree from the University of Redlands is required to complete from each of the nine categories listed below one approved course of at least three units.

Every student transferring to Redlands from another institution of higher education must satisfy all four of the skills requirements. Since transfer courses may not be applied toward the values requirement, a transfer student is credited with satisfying, at his choosing, one of the five values categories for each 30 units of transfer credit which the University of Redlands accepts. Hence, a transfer student entering Redlands as a junior would be required to take only three of the five required values categories, providing that 60 or more units of transfer courses were accepted by the Registrar.

Acceptable Crafton Hills College courses are listed following each of the skill categories.

Four Skills

1. **Written Communication:** The development of proficiency in the use of written English to communicate information, ideas and feelings to a variety of audiences.
English 100
2. **Quantitative Techniques:** The application of numerical methods to the solving of quantitative problems related to an area of present interest or related to a potential career.
Accounting 210, Computer Info. Sciences 104
Chemistry 160, Math 108 and 153
3. **Scientific Method:** The development of an understanding of the methods used to solve problems in the natural sciences and the acquisition of basic skills in observation and experimentation through experiences in laboratory and/or field investigation.
Astronomy 150, Biology 120, Business Administration 206,
Chemistry 101, Geology 100, 250
4. **Creative Process:** The consideration of the elements of the creative process, the formation of standards of aesthetic judgment and the encouragement of the use of imagination through experience with one or more areas of creative activity.
Art 100, 115, 117, 210, English 234, 235, 250, 251, Music 100,
Theatre Arts 120, 130 & 231 (combined), 140

FIVE VALUES

5. **Personal Commitment:** The confrontation of the individual with great ideas and great lives as a basis for developing one's personality, style, mode of expression, manner of thinking, beliefs, commitments and philosophy.
6. **Social Priorities:** The development of approaches and priorities by which one can assess the needs of society and act to realize these needs.
7. **American Institutions:** The acquisition of the knowledge of the basic institutions upon which the United States was founded and developed and an understanding of their significance to the American people today.
8. **Cross-Cultural Contrasts:** An exposure to the values, aspirations, and accomplishments of an ethnic or national culture other than one's own in order to provide a broader base for understanding both cultures. (International students should study an American minority culture; American minority students should study an international culture.)
9. **Beauty and Nature:** The development of appreciation for beauty, the joy of nature and for all forms of life based on an understanding of their relationships.

The number of P.E. units required for transfer students is equal to 1/2 or more of the number of semesters the student attends the University of Redlands. The maximum number of required P.E. units, including transfer credit, is 4.

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NOTICE OF RESTRICTION

Inter-District Permits

Students who are residents of the following Community College Districts must secure an inter-District Permit from their college district prior to registering for classes at Crafton Hills College. EC Sect. 25505.5:

Barstow Community College
*Chaffey Community College
Coast Community College District
College of the Desert
Fullerton Community College
Mt. San Antonio Community College
Mt. San Jacinto Community College
Palomar Community College
'Riverside Community College
Santa Ana Community College
Victor Valley Community College

'Students residing within these districts may take a maximum of 6 units without an Inter-District Permit.

Students residing in other districts intending to register at Crafton Hills College must check with the Admissions Office for restrictions and necessary releases.